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Twenty-Seventh

Annual Bulletin

—OF—

COLORADO COLLEGE

AND

CUTLER ACADEMY

Colorado Springs, Colorado,
1901.

COLORADO SPRINGS.
THE GOWDY-SIMMONS PRINTING CO.
1901.

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ANNOUNCEMENT.

Colorado College is the oldest institution of higher education in the State. In 1874, while Colorado was yet a territory, a College upon a broad Christian foundation was established in Colorado Springs. The authorized announcement for that year contains the following words:

"It is the purpose of the Trustees to build a College in which liberal studies may be pursued under positive Christian influences. . . . The college is under no ecclesiastical or political control. Members of different churches are on its board of trustees. . . . The character which is most desired for this College is that of thorough scholarship and fervent piety, each assisting the other, and neither ever offered as a compensation for the defects of the other."

From the beginning the Board of Trustees has been composed of leading professional and business men of Colorado, together with a few Eastern men of similar standing, and has ever been animated by the purpose avowed by the original Board.

A grant of land had been made in advance of the organization of the College, in 1873, by the Fountain Company, the founders of the city of Colorado Springs. The Rev. Jonathan Edwards was the first professor and executive officer. The first President, the Rev. James G. Dougherty, was elected in 1875, and was succeeded in the following year by the Rev. E. P. Tenney. From 1885 to 1888 there was no President, but the work of teaching was carried on without interruption. At this time there was only one building on the campus, Palmer Hall, erected in 1880.

In the autumn of 1888 William Frederick Slocum was elected President. The faculty was at once enlarged, the courses re-organized, and Cutler Academy incorporated as an associated preparatory school, in which students have since been trained, not only for Colorado College, but for all the leading institutions of the United States. Within the following two years a hundred thousand dollars was given toward endowment, entirely from within the state of Colorado. Hagerman Hall was built in 1889. In the same year the Woman's Educational Society was organized and began the work of building Montgomery Hall. In 1890 the Colorado College Scientific Society was founded, and the first installment of its annual publication, "Colorado College Studies," was issued.

Within the decade just past, the sum of four hundred thousand dollars has been added to the endowment, and the growth of the College in numbers has been equalled by an appropriate enlargement of equipment and activity. Among the marks of advance are the gymnasium, built by the efforts of students; the costly Library building, given by the late N. P. Coburn; the Observatory, the gift of Henry R. Wolcott, of Denver; and Ticknor Hall, completed during the closing days of 1897, as a second dwelling house for young women. The entire cost of this beautiful building, exceeding $23,000, was met by a single donor who insisted upon remaining unknown. During the past year another large stone building, costing $30,000, has been completed. It has been named in honor of a generous donor, the late Willard B. Perkins, "The Perkins Fine Arts Hall." The first floor is an auditorium, used for the religious services of the College and other public meetings. This room contains a valuable pipe organ, the gift of Miss Elizabeth Cheney, of Wellesley, Massa-

chusetts, in memory of her brother, Mr. Charles P. Cheney, who died at Colorado Springs in 1897. The second story of this building is occupied by the Department of Fine Arts and the Conservatory of Music.

During the past year $160,000 has been secured for the erection and endowment of an Administration and Science building. It will contain the general offices of administration and a complete equipment for scientific lectures and laboratory work in all departments.

Growth in other directions during the last five years is indicated by the establishment of a course leading to the degree of Bachelor of Science, by the University Extension work, by the addition of an Art Department and by the founding of the Conservatory of Music, which, while preserving its proper relation to the academical departments, successfully maintains an equally high educational standard. While not without needs that are keenly felt, the College has won an assured position, and offers to its students educational facilities of the same grade as are found at Eastern institutions of the higher learning.

TRUSTEES OF THE COLLEGE.

WILLIAM F. SLOCUM, *President of the Board*,	Colorado Springs.
GEORGE W. BAILEY,	Denver.
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WILLIAM P. BONBRIGHT,	Colorado Springs.
REV. W. H. W. BOYLE, D. D.,	Colorado Springs.
JOHN CAMPBELL,	Denver.
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IRVING HOWBERT,	Colorado Springs.
WILLIAM S. JACKSON,	Colorado Springs.
HORACE G. LUNT,	Colorado Springs.
WILLIAM J. PALMER,	Colorado Springs.
GEORGE FOSTER PEABODY,	New York.
PHILIP B. STEWART,	Colorado Springs.
M. D. THATCHER,	Pueblo.
FRANK TRUMBULL,	Denver.

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EXECUTIVE.

M. D. THATCHER, *Chairman;* JAMES B. GREGG, *Secretary;* WILLIAM S. JACKSON, WILLIAM J. PALMER.

FINANCE.

WILLIAM S. JACKSON, *Chairman*; WILLIAM P. BONBRIGHT, IRVING HOWBERT, WILLIAM J. PALMER, FRANK TRUMBULL.

INSTRUCTION.

JAMES B. GREGG, *Chairman;* GEORGE W. BAILEY, DAVID N. BEACH, W. H. W. BOYLE, JOHN CAMPBELL, HORACE G. LUNT.

GROUNDS AND BUILDINGS.

WILLIAM P. BONBRIGHT, *Chairman;* THOMAS S. HAYDEN, WILLIAM J. PALMER.

(The President of the College is *ex-officio* a member of all committees.)

COLLEGE OFFICERS.

WILLIAM F. SLOCUM, President. JAMES B. GREGG, Secretary.
GEORGE N. MARDEN, Treasurer.

BOARD OF CONTROL OF THE N. P. COBURN LIBRARY.

CHAIRMAN—PRESIDENT SLOCUM.

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Rev. Benjamin Brewster.
Miss Ellen T. Brinley.
Prof. Florian Cajori.
Mr. Louis R. Ehrich.
Rev. W. H. Fish, Jr.
Prof. M. C. Gile.
Mrs. E. C. Goddard.
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Mr. H. F. Ordway.
Prof. E. S. Parsons.
Mrs. Chas. Peabody.
Mr. J. G. Shields.
Mr. Leslie J. Skelton.
Mrs. W. F. Slocum.
Dr. S. E. Solly.
Mrs. A. E. Touzalin.
Prof. T. K. Urdahl.

FACULTY.

WILLIAM FREDERICK SLOCUM, B. D., LL. D. 24 College Place.

President and Head Professor of Philosophy.

A. B. (Amherst), '74; B. D. (Andover), '78; LL. D. (Amherst), '93; LL. D. (University of Nebraska), '94; Colorado College, '88.

LOUIS A. E. AHLERS, A. B. South Hall.

Head Professor of Modern Languages and Literatures.

A.B. (Harvard), '94; Colorado College, '95.

ELIZABETH BARROWS, Montgomery Hall.

Instructor in Gymnastics.

Graduate of the Anderson Normal School, New Haven, '94; Chatauqua, '95; Colorado College, '99.

ERNEST BREHAUT, A. M. 224 E. Dale St.

Instructor in Latin.

A. B. (Dalhousie), '94; A. B. (Harvard), '96; A. M. (*ibid.*), '97; Colorado College, '98.

CHARLES BROOKOVER, M. S. 416 East Yampa St.

Assistant Professor of Biology.

A. B. (National Normal University), '90; B. Ped. (Ohio University), '94; M .S. (*ibid.*), '97; Instructor in Biology, Ohio University, '97-'98; Colorado College, '98.

FLORIAN CAJORI, M. S., PH. D. 1119 Wood Ave.

Head Professor of Mathematics.

S. B. (Wisconsin), '83; M. S. (*ibid.*), '86; PH. D, (Tulane), '94; Assistant Professor of Mathematics, Tulane University, '85-87; Professor of Applied Mathematics, Tulane University, '87-'88; United States Bureau of Education, '88-'89; Colorado College, '89.

ANNA PEARL COOPER, A. B. 17 North Wahsatch Ave.

Instructor in English and History.

A. B. (Colorado College), '96; Colorado College, '99.

NATHAN BROWN COY, A. B. 224 E. Dale St.

Principal of Cutler Academy and Associate Professor of Classical Languages and Literatures.

A. B. (Yale), '70; Professor of Latin, Phillips Academy, Andover, Mass., '75-'76; Department of Classics, Denver High School, '81-'86; State Superintendent of Public Instruction, Colorado, '91-'93; Colorado College, '97.

FRANCIS WHITTEMORE CRAGIN, PH. D. 1715 Wood Ave.

Professor of Geology, Mineralogy and Palæontology.

Agassiz Laboratory, Newport, '81; S. B. (Harvard), '82; PH. D. (Johns Hopkins), '99; Professor of Natural History, Washburn College, '82-'91; Assistant Geologist, State Geological Survey of Texas, '92-'93; Colorado College, '91.

M. CLEMENT GILE, A. M. 1121 North Tejon St.

Head Professor of Classical Languages and Literatures.

A. B. (Brown), '83; A. M. (*ibid.*), '86; Instructor in Phillips Academy, Andover, Mass., '83-'92; Assistant Professor of Greek, University of Chicago, '92-'94; Colorado College, '92.

RUBIN GOLDMARK, A. M. 24 E. Dale St.

Director of the Conservatory of Music, and Professor of Harmony, Counterpoint and Composition.

Conservatory of Music, Vienna, '89-'91; Pupil of Rafael Joseffy and Anton Dvorak, '91; A. M. (Colorado College), '99; Instructor National Conservatory of Music, New York, '91-'93; Colorado College, '95.

JAMES B. GREGG, A. B., D. D. 9 E. Dale St.

Lecturer on the Ethics of the Old Testament.

A. B. (Harvard), '66; Andover Theological Seminary, '71-'74; D. D. (Colorado College), '92.

FREDERICK R. HASTINGS, A. M. 811 North Cascade Ave.

Lecturer on the History of Philosophy.

Worcester (Mass.) Polytechnic Institute, '83-'85; PH. B. (Colorado College), '91; A. M. (*ibid.*), '92.

EDNA JACQUES, 615 North Cascade Ave.

Instructor in Latin.

A. B. (Colorado College), '00; Colorado College, '00.

HENRY W. LAMB, 1005 N. Wahsatch Ave.

Assistant in Chemistry.

ELLSWORTH GAGE LANCASTER, A. M., B. D., PH.D. 1451 N. Nevada Ave.

Assistant Professor of Philosophy and Pedagogy.

A. B. (Amherst), '85; A. M. (*ibid.*), '88; B. D. (Andover), '89; PH. D. (Clark University), '97; Colorado College, '97.

RUTH LOOMIS, A. B. Ticknor Hall.

Dean of Women.

A. B. (Vassar), '85; Instructor in English, Vassar, '86-'95; Colorado College, '96.

FRANK HERBERT LOUD, A. M., PH. D. 1203 North Tejon St.

Professor of Mathematics and Astronomy.

A. B. (Amherst), '73; A. M. (Harvard), '99; PH. D. (Haverford), '00; Walker Instructor in Mathematics, Amherst, '73-'76; Instructor in Geometry, Smith College, '79; Colorado College, '77.

HANNAH TAYLOR MUIR, M. D. 611 North Tejon St.

Medical Adviser.

M. D. (University of Colorado), '93; Clinical Obstetrician, University of Colorado, '93-'95; Assistant County Physician, Arapahoe County, Colo., '93-'94; Post Graduate School of Medicine and Polyclinic, New York, '95; Allgemein Polyclinic, Vienna, '96; Colorado College, '95.

ATHERTON NOYES, A. B. 815 North Tejon St

Dean of the Faculty and Assistant Professor of English and Greek

A. B. (Yale), '85; Colorado College,' 92.

EDWARD S. PARSONS, A. M., B. D. 1328 North Nevada Ave.

Vice-President and Bemis Head Professor of English.

A. B. (Amherst), '83; A. M. (*ibid.*), '86; B. D. (Yale), '87; Colorado College, '92.

SIDNEY F. PATTISON, A. B. 611 North Tejon St.

Instructor in English.

A. B. (Rochester), '98; A. B. (Williams), '99; Colorado College, '99.

ROWLAND H. RITCHIE, PH.B. 416 East Yampa St.

Instructor in Oratory.

PH. B. (Chicago), '00; Colorado College, '00.

JOHN CUTLER SHEDD, M. S., PH.D. 2112 North Nevada Ave.

Professor of Physics.

A. B. (Princeton), '91; M. S. (Cornell), '92; PH. D. (Wisconsin), '99; Professor of Physics, Marietta College, '93-'97; Instructor in Physics, Wisconsin, '99-'00; Colorado College, '00.

HUGH ALLISON SMITH, A. M. 415 East San Rafael St.

Assistant Professor of Modern Languages.

A. B. (University of Missouri), '97; A. M. (*ibid.*), '98; Assistant in the Department of Romance Languages, University of Missouri, '97-'98; Colorado College, '99.

LOUIS JEANNERET SOUTTER. 222 North Cascade Ave.

Director of the Department of Art and Design.

Graduate, University of Lausanne, '90; Student, Royal Conservatory of Music, Brussels, under Eugene Ysaye, '92-'95; Student, Ecole des Beaux Arts and Colarossi Atelier, Paris, '95-'98; Pupil of Benjamin Constant and Jean Paul Laurent, '99; Colorado College, '98.

WILLIAM STRIEBY, A. M., E. M. 805 North Cascade Ave.

Professor of Chemistry and Metallurgy.

A. B. (University of New York), '75; E. M. (Columbia University School of Mines), '78; A. M. (University of New York), '79; Principal Santa Fe Academy, Santa Fe, N. M., '78-'80; Colorado College, '80.

THOMAS K. URDAHL, M. L., Ph. D. 730 North Weber St.

Professor of Political and Social Science.

B. L. (Wisconsin), '91; M. L. (*ibid.*), '92; PH. D. (*ibid.*), '97; Assistant in Economics (*ibid.*), '99-'00; Colorado College, '00.

FRANCES SEDGWICK WIGGIN, B. L. South Hall.

Librarian.

B. L. (University of Wisconsin), '82; Colorado College, '98.

FACULTY OF MUSIC.

RUBIN GOLDMARK, DIRECTOR. 24 East Dale St.

CLARENCE WILBER BOWERS. 410 East Yampa St.

Instructor in Piano-forte and Organ.

Graduate, New England Conservatory of Music, Boston; Pupil of G. W. Chadwick and Ferruccio Busoni, '90-'92; Pupil of Alexandre Guilmant, Paris, '95-'96; Organist and Instructor in Music in Seminary and Academy, Andover, Mass., '91-'92; Professor of Instrumental Music and Harmony, Cornell College, Mt. Vernon, Iowa, '92-'95; Colorado College, '96.

GEORGE CRAMPTON.

Instructor in Voice Culture and Sight Reading.

Royal College of Music, London, '94; Pupil of Sir C. Hubert Parry, Dr. C. V. Stanford, Sir Walter Parrutt, and Henry Blower; Colorado College, '99.

OMA FIELDS. 808 North Weber St.

Instructor in Piano-Forte.

New England Conservatory of Music (graduate), '89; Pupil of Leschetitzky, Vienna, '96; Colorado College, '94.

MAME HERMAN. 801 North Weber St.

Instructor in Violin.

Graduate, Conservatory of Leipsic, '95; pupil of Hans Sitt, '90-95; Colorado College, '00.

FACULTY OF ART AND DESIGN.

LOUIS J. SOUTTER. 222 North Cascade Ave.

Director and Instructor in Drawing and Painting.

JOHN L. WAID. 823 West Pike's Peak Ave.

Instructor in Commercial Art, Mechanical Drawing, and Designing.

Chicago Art Institute, '96-'98; Colorado College, '00.

STANDING COMMITTEES OF THE FACULTY.

ACCREDITED SCHOOLS.

Prof. Coy, *Chairman;* The President, Prof. Lancaster.

ART.

Mr. Soutter, *Chairman;* Miss Loomis, Mr. Waid.

ATHLETICS.

Prof. Ahlers, *Chairman;* Prof. Cajori, Prof. Smith.

COURSES OF STUDY OF INDIVIDUAL STUDENTS.

COLLEGE— Prof. Gile, *Chairman;* Prof. Noyes, Prof. Shedd, Miss Loomis.

ACADEMY—Prof. Coy, *Chairman;* Mr. Pattison, Miss Loomis.

DISCIPLINE.

COLLEGE—The President, *Chairman;* Profs. Cajori, Gile.

ACADEMY—Prof. Coy, *Chairman;* The President, Prof Gile.

MUSIC.

Prof. Goldmark, *Chairman;* Miss Loomis, Mr. Crampton.

POST-GRADUATE DEGREES.

Prof. Lancaster, *Chairman;* Prof. Cragin, Prof. Urdahl.

SCHEDULE AND PUBLICATIONS.

Prof. Cajori, *Chairman;* Prof. Loud, Mr. Brehaut, Mr. Pattison.

SCHOLARSHIPS.

The President, *Chairman;* Prof. Gile, Prof. Strieby.

STUDENTS' SELF-HELP.

Prof. Lancaster, *Chairman;* Prof. Ahlers, Prof. Brookover.

CLASS OFFICERS.

COLLEGE.	ACADEMY.
Seniors—The President.	IV—Prof. Gile.
Juniors—Prof. Lancaster.	III—Mr. Pattison.
Sophomores—Prof. Ahlers.	II—Mr. Ritchie.
Freshmen—Prof. Cajori.	I—Prof. Coy.
Special Students—Prof. Strieby.	*Special Students*—Miss Cooper.

CALENDAR.

1901.

May	30	Thursday	Memorial Day; a holiday.
June	3	Monday	Examinations begin. First Entrance Examinations begin.
June	9	Sunday	Baccalaureate Sermon.
June	10	Monday	College Oratorical Contest.
June	11	Tuesday	Cutler Academy Graduation Exercises.
June	12	Wednesday	Commencement Exercises.
Sept.	17	Tuesday	Second Entrance Examinations begin.
Sept.	18	Wednesday	First Half-year begins at 8:30 A. M.
Nov.	6	Wednesday	Insignia Day.
Nov.	27	Wednesday	Thanksgiving Recess begins at 1 P. M.
Dec.	2	Monday	Thanksgiving Recess ends at 8:30 A. M.
Dec.	18	Wednesday	Christmas Recess begins at 1 P. M.

1902.

Jan.	2	Thursday	Christmas Recess ends at 8:30 A. M.
Jan.	30	Thursday	Day of Prayer for Colleges.
Feb.	3	Monday	Mid-year Examinations begin.
Feb.	10	Monday	Second Half-year begins at 8:30 A. M.
Feb.	22	Saturday	Washington's Birthday; a holiday.
March	26	Wednesday	Easter Recess begins at 1 P. M.
April	3	Thursday	Easter Recess ends at 8:30 A. M.
May	30	Friday	Memorial Day; a holiday.
June	9	Monday	Examinations begin. First Entrance Examinations begin.
June	15	Sunday	Baccalaureate Sermon.
June	17	Tuesday	Class Day. Cutler Academy Graduation Exercises.
June	18	Wednesday	Commencement Exercises.
Sept.	16	Tuesday	Second Entrance Examinations begin.

REQUIREMENTS FOR ADMISSION

TO THE

FRESHMAN CLASS.

For the Course Leading to the Degree of Bachelor of Arts.

Admission by Examination.

1. Greek.—(*a.*) A thorough knowledge of inflection, with the use of the accents, and the ordinary grammatical constructions. (*b.*) Four books of the Anabasis. (*c.*) Three books of the Iliad, with prosody and dialectic forms. (*d.*) Translation at sight of average passages from Xenophon and Homer. (*e.*) The translation into Greek of a passage of connected discourse of moderate difficulty. (Collar and Daniell's Greek Prose Composition, or the first forty-four exercises in Allinson's, will indicate the nature of the work required.) (*f.*) Such a brief general view of Greek history as is contained in the revised edition of Pennell's or Myer's History of Greece.

2. Latin.—(*a.*) Grammar. Special stress will be laid upon an accurate and ready knowledge of grammatical forms. (*b.*) Cæsar: Gallic War, Bks. I-IV, or an equivalent. (*c.*) Cicero: seven orations. (*d.*) Vergil: Aeneid, Bks. I-VI. (*e.*) Translation at sight of easy passages of prose Latin. (*f.*) Prose Composition (Daniell, or Moulton and Collar.) (*g.*) An outline knowledge of the history of the Roman Republic.

3. English.—(*a.*) The candidate will be required to write a short essay, which will be judged from the standpoint of thought, spelling, punctuation, grammar and division into paragraphs, on one of several topics

which will be announced at the time of the examination. In 1901 and 1902 the topics will be chosen from the following works:

Shakespeare's Merchant of Venice; Pope's Iliad, Books I, VI, XXII and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

In 1903 Shakespeare's Julius Cæsar and Carlyle's Essay on Burns will be substituted for Pope's Iliad and Cooper's Last of the Mohicans.

All these books are to be read carefully and intelligently. Minute knowledge of them will not be required, but the candidate will be expected to have clearly in mind their important parts.

(*b.*) In addition to the above, the candidate will be required in each year to pass an examination upon the subject matter, form and other literary qualities of the following books: Shakespeare's Macbeth, Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

A mastery of the essentials both of English Grammar and of elementary rhetoric will also be required of all candidates.

4. German or French. — A good elementary knowledge of the language, sufficient for reading easy prose at sight. See outline of courses, "German A" and "French A," on pp. 36 and 37 respectively.

5. Mathematics.—(*a.*) Algebra, through simultaneous quadratic equations. (*b.*) Elementary Plane Geometry, or as much as is contained in the first five books of Beman and Smith's, or Phillips and Fisher's,

or Wentworth's Geometry. (*c.*) After 1903, Solid Geometry.

Candidates from schools where Greek is not taught, who have completed the preparation for the Bachelor of Philosophy division of the Freshman class, but prefer to follow the course for the degree of Bachelor of Arts, will be allowed to do so by taking Greek through the whole four years.

Admission by Certificate.

Candidates who offer satisfactory evidence of having completed a preparatory course similar in character and equivalent in extent to the above requirements, will be admitted without condition into the Freshman class in the course leading to the degree of Bachelor of Arts.

For the Course Leading to the Degree of Bachelor of Philosophy.

Admission by Examination.

In Latin, English, German (or French), and Mathematics, the requirements and recommendations are the same as for the course leading to the degree of Bachelor of Arts. Candidates for admission to this course need not offer Greek, in place of which they will be examined in the following subjects:

1. Physics.—One year of work; not less than two hours per week being devoted to the text and four to laboratory work. The text covered should be equivalent to Carhart and Chute's Elements of Physics, or Wentworth and Hill's Text-Book of Physics.

2. Chemistry.—Williams' Elements of Chemistry, or an equivalent.

3. Botany.—Gray's Lessons (revised edition), or Bergen's Elements of Botany.

4. Physiology.—Martin's Briefer Course, or an equivalent.

5. American or English History.—An outline knowledge of the leading facts.

Admission by Certificate.

Candidates who offer satisfactory evidence of having completed a preparatory course similar in character and equivalent in extent to the above requirements, will be admitted without condition into the Freshman class in the course leading to the degree of Bachelor of Philosophy.

For the Course Leading to the Degree of Bachelor of Science.

Admission by Examination.

In Physics, Chemistry, Botany, Physiology, American or English History, and in English, the requirements are the same as for the course leading to the degree of Bachelor of Philosophy. The following are the additional requirements:

1. Languages.—Latin, German or French, amounting collectively to four full years of work, two of which must be in Latin or German.

2. Mathematics.—(*a.*) Algebra, through simultaneous quadratic equations; (*b.*) Plane Geometry, as much as is contained in the first five books of Beman and Smith's, or Phillips and Fisher's, or Wentworth's Geometry; (*c.*) either Solid and Spherical Geometry, or Plane Trigonometry.

Admission by Certificate.

Candidates who offer satisfactory evidence of having completed a preparatory course similar in character and equivalent in extent to the above requirements, will be admitted without condition into the Freshman class in the course leading to the degree of Bachelor of Science.

Accredited Schools.

The following schools are on the accredited list; certificates of the satisfactory completion, in any of them, of any branch in the course of study required for admission to the College will be accepted in lieu of examination. A personal statement from the principal as to the grade of scholarship and moral character of each candidate is required to be forwarded by mail to the Dean.

Aspen High School.
Canon City High School.
Canon City So. Side High School.
Central City High School.
Cheyenne (Wyo.) High School.
Colorado Springs High School.
Cripple Creek High School.
Delta High School.
Denver: High School, Dist. No. 1.
" High School, Dist. No. 2.
" High School, Dist. No. 7.
" High School, Dist. No. 17.
" Manual Training High School.
Douglass Co. H. S., Castle Rock.
Durango High School.
Florence High School.
Fort Collins High School.
Fort Morgan High School.
Georgetown High School.
Golden High School.
Gordon Academy, Salt Lake City.
Grand Junction High School.
Greeley High School.
Idaho Springs High School.
Jarvis Hall, Montclair.
Leadville High School.
Longmont High School.
Manitou High School.
Montclair High School.
Monte Vista High School.
Otero Co. High School, La Junta.
Ouray High School.
Pueblo High School, Dist. No, 1.
" High School, Dist. No. 20.
Salida Academy.
Salida High School.
Telluride High School.
Trinidad High school.
Victor High School.
Walsenburg High School.
Wheat Ridge High School, Alcott.
Miss Wolcott's School, Denver.
Wolfe Hall, Denver.

ENTRANCE EXAMINATIONS.

Examinations for admission to the College will take place on Monday and Tuesday, June 3 and 4, 1901, and again on Tuesday, September 17, 1901. They are held in Palmer Hall, beginning at 9 A. M. No examination

will be held between these dates, but delayed examinations may be held after the beginning of the fall term for the accommodation of students who, for good reason, have been unable to attend at the regular time.

For the accommodation of students residing at a distance, examinations will be held under the direction of authorized persons, at various points in and near the State, as need may require. The cities of Cheyenne, Wyo., Denver, Pueblo, Trinidad, Leadville, Montrose and Grand Junction, Colo., and Las Vegas, N. M., are points where such arrangements can readily be made, and others may be added, if necessary. But students who desire examinations at these or other points must notify the President at least three weeks in advance of the time of the regular examination.

ADMISSION TO COURSES.

Students will be received into advanced classes on examination in the studies of the preceding year. The Faculty may, at their discretion, receive certificates from other colleges as evidence that the student has satisfactorily pursued those or equivalent studies. Students are expected to register and begin attending their courses at the first exercise of each half year.

COURSES OF STUDY.

Three courses of study are offered in the College, each subject to considerable variation at the will of the student. The course leading to the degree of Bachelor of Arts corresponds to that which the best Eastern colleges require for the same degree. In the course leading to the degree of Bachelor of Philosophy there

is no Greek, and less Latin than in the course for Bachelor of Arts; but the required work includes more of the Sciences and Modern Languages. The course leading to the degree of Bachelor of Science is so arranged that special attention may be devoted to any one of five principal lines of study, which give prominence to Mathematics, Physics, Chemistry, Biology, and Geology, respectively.

For graduation a student must have completed an average of seventeen hours per week throughout the four years (total requirement 68 hours).

OUTLINE OF COURSES.

Freshman Yr.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	Mathematics A (1) (p. 41)	4	Mathematics A (1) (p. 41)	4	Mathematics A (1) (p. 41)	4
	German B (p. 36) or French B (p. 37)	4	German B (p. 36) or French B (p. 37)	4	French or German (pp. 37, 36)	4
	English A and B (p. 34)	3	English A and B (p. 34)	3	English A and B (p. 34)	3
	Greek A (p. 32)	3	Latin A (p. 33) or French A* (p. 37) or German A* (p 36)	3 / 4 / 4	Chemistry B (p. 44)	4
	Latin A (p. 33)	3			Biology A (p. 45)	3
		17	Biology A (p. 45)	3		18
				17 or 18		
Second Half	Mathematics A (2) (p. 41)	2	Mathematics A (2) (p. 41)	2	Mathematics A* (2) (p. 41) or Mathematics A* (3) (p. 41)	2 / 2
	Mathematics A (3) (p. 41)	2	Mathematics A (3) (p. 41)	2		
	German B (p. 36) or French B (p. 37)	4	German B (p. 36) or French B (p. 37)	4	French or German (pp. 37, 36)	4
	English B (p. 34)	1	English B (p. 34)	1	English B (p. 34)	1
	Oratory A (p. 35)	2	Oratory A (p. 35)	2	Oratory A (p. 35)	2
	Greek A (p. 32)	3	Latin A (p. 33) or French A* (p. 37) or German A* (p. 36)	3 / 4 / 4	Chemistry B (p. 44)	4
	Latin A (p. 33)	3			Biology A (p. 45)	3
		17			Elective	2
	Elective.		Biology A (p. 45)	3		18
	Mathematics A (4) (p. 41)	1		17 or 18		

* Whichever was not offered as part of the preparation for College.

OUTLINE OF COURSES.—CONTINUED.

SOPHOMORE YR.	A. B. COURSE.		PH. B. COURSE.		S. B. COURSE.	
		HRS.		HRS.		HRS.
FIRST HALF.....	English C (p. 34).....	3	French or German (pp. 37, 36)..	4	German or French (pp. 36, 37)..	4
	German or French (pp, 36, 37)..	3	Chemistry B p. 44).....	4	English C (p. 34).....	3
	Oratory B (p. 35).....	1	Physics A (p. 42).....	4	Physics B (p. 43).....	5
	Physics A* (p. 42).....	4	English C (p. 34).....	3	Additional requirement (p. 25)	5 or 6
	or			15		17 or 18
	Biology A* (p. 45).....	3				
		10 or 11				
	Elective.		*Elective.*			
	(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)		(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)			
	Latin B (p. 33).....	3	Latin B (p. 33).....	3		
	Greek B (p. 33).....	3	Mathematics B (1) (p. 41).....	3		
	Mathematics B (1) (p 41)	3	Mathematics C (p. 42).....	3		
	Astronomy A (p. 42).....	3	Astronomy A (p. 42).....	3		
	History A‡ (p. 41)	2	History A‡ (p. 41).....	2		
	History B‡ (p. 41)....	2	History B‡ (p. 41).....	2		
	Bible (p. 49).....	1	Bible (p. 49).	1		
	Biology A (p. 45).....	3		17 or 18		
		17 or 18				
SECOND HALF	English D (p. 34)..	3	French or German (pp. 37, 36)..	4	English D (p. 34).....	3
	French or German (pp. 37, 36)..	3	Oratory B (p. 35).....	2	French or German (pp. 37, 36)..	4
	Oratory B (p. 35).....	1	Chemistry B (p. 44).....	4	Physics B (p. 43).....	5
	Physics A* (p. 42).....	4	Physics A (p. 42)..... ..	4	Additional requirement (p. 25)	5 or 6
	or			14		17 or 18
	Biology A* (p. 45)..... ...	3				
		10 or 11				
	Elective.†		*Elective.*†			
	(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)		(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)			
	Latin B (p. 33).....	3	‖English D (p. 34).....	3		
	Greek B (p. 33).....	3	Latin B (p. 33).....	3		
	Greek Art (p. 33).....	1	Mathematics B (2) (p. 42).....	3		
	Mathematics B (2) (p. 42).....	3	Mathematics C (p. 42).....	4		
	Mathematics D (p. 42).....	2	Mathematics D (p. 42)...	2		
	History A‡ (p. 41).....	2	History A‡ (p. 41).....	2		
	History B‡ (p. 41).....	3	History B‡ (p. 41)..... ...	3		
	Bible (p. 49).....	1	Bible (p. 49)	1		
	Biology A (p. 45)..	3	Greek Art (p. 33).....	1		
	Biology C (p. 45).....	3	Biology C (p. 45).....	3		
		17 or 18		17 or 18		

* Both these subjects may be taken or both may be omitted if the student takes Chemistry A in his Junior year.

† Courses continuing through the year may not be dropped at the half-year. They may, however, be entered at the second half with the consent of the instructor.

‡ History amounting to 2 hours for one year must be included in the student's course.

‖ A half-year of English Literature must be included at some time in the student's course.

OUTLINE OF COURSES—CONTINUED.

Junior Year.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	Philosophy A (p. 30)	3	Philosophy A (p. 30)	3	Philosophy A (p. 30)	3
	Economics A (p. 39)	4	Geology A (p. 47)	4	Geology A (p. 47)	4
	Chemistry A* (p. 43)	4	Economics A (p. 39)	4	Additional requirement (p. 25)	4
	Electives (pp. 26-29)	6 or 10	Electives (pp. 26-29)	6	Electives† (pp. 26-29)	6
		17		17		17
Second Half	Philosophy A (p. 30)	3	Philosophy A (p. 30)	3	Philosophy A (p. 30)	3
	Chemistry A* (p. 44)	4	Geology A (p. 47)	4	Geology A (p. 47)	4
	Electives (pp. 26-29)	10 or 14	Electives (pp. 26-29)	10	Additional requirement (p. 25)	4
		17		17	Electives† (pp. 26-29)	6
						17
Senior Year. First Half	Philosophy C (p 31)	4	Philosophy C (p. 31)	4	Philosophy C (p. 31)	4
	Electives (pp. 26-29)	13	Electives (pp. 26-29)	13	Additional requirement (p. 25)	4
		17		17	Electives (pp. 26-29)	9
						17
Second Half	Philosophy D p. 31)	4	Philosophy (D (p. 31)	4	Philosophy D (p. 31)	4
	Electives (pp. 26-29)	12	Electives (pp. 26-29)	12	Additional requirement (p. 25)	4
		16		16	Electives (pp. 26-29)	8
						16

*Required only of students who have had neither Physics A nor Biology A in the Sophomore year.
†History amounting to 2 hours for one year must be included in the student's course.

ADDITIONAL REQUIREMENTS IN S. B. COURSE.

Course in Pure Mathematics and Astronomy.	HRS.	Course in Physics.	HRS.	Course in Biology.	HRS.	Course in Geology.	HRS.	Course in Chemistry.	HRS.
Sophomore Year.									
First Half.									
Mathematics B (1) (p.41)	3	Mathematics B (1) (p. 41)	3	Mathematics B (1) (p.41) or Astronomy A (p. 42)	3	Mathematics B (1) p. 41) or Astronomy A (p. 42)	3	Mathematics B (1) p. 41) or Astronomy A (p. 42)	3
Mathematics C (p. 42)	3	Mathematics C (p. 42)	3	Biology B (p. 45)	2	Geology B (p. 47)	3	Chemistry C (p. 44)	3
	6		6		5		6		6
Second Half.									
Mathematics C (p. 42)	4	Mathematics C (p 42)	4	Biology B (p. 45)	3	Biology C (p. 47)	3	Chemistry C (p. 44)	6
Mechanical Drawing	2	Mechanical Drawing	2	Biology C (p. 45)	3	Geology F (p. 47)	3		
	6		6		6		6		
Junior and Senior Years.									
Mathematics and Astronomy (pp. 41-42)	4	Physics (p. 42)	4	Biology (p. 45)	4	Geology (p. 46)	4	Chemistry (p. 43)	4

ELECTIVE COURSES.

Unless otherwise stated, each Elective Course continues through the year. Not all the Electives will be given in any one year.

PHILOSOPHY.—(Page 29.)

		HOURS PER WEEK
B.	*Psychological Seminary*	1
E.	*Modern German Philosophy;* first half-year	2
F.	*The Philosophical Movement in England;* second half-year	2
G.	*Advanced Logic;* second half-year	2
H.	*Lotze;* second half-year	2
I.	*Seminary in Social Ethics;* second half-year	1
J.	*Seminary in Greek Philosophy;* one half-year	1
K.	*Evolution of Religious Thought;* second half-year	2

PEDAGOGY.—(Page 32.)

A.	*History and Philosophy of Education;* first half-year.	2
B.	*School Hygiene and Child Study;* second half-year	2
C.	*Original Observations*	1
D.	*Pedagogical Seminary*	1

GREEK.—(Page 32.)

B.	*Drama*	3
C.	*History;* one half-year	3
D.	*Philosophy;* one half-year	3
E.	*Epic and Lyric Poetry;* one half-year	3
F.	*Course for Teachers;* one half-year	3
G.	*Greek Art;* second half-year	1

LATIN.—(Page 33.)

C.	*Drama;* one half-year.	3
D.	*Elegiac Poetry;* one half-year	3
E.	*Satire;* one half-year	3
F.	*Roman Life*	3
G.	*Vergil;* one half-year	3
H.	*Course for Teachers;* one half-year	3

ENGLISH.—(Page 34.)

D.	*American Literature;* second half-year	3
E.	*Early English Literature;* first half-year	3
F.	*Middle English;* second half-year	3
G.	*Chaucer and Spenser;* first half-year	3
H.	*English Drama;* first half-year	3
I.	*Shakespeare;* second half-year	3

J. *Shakespeare* 2
K. *Milton;* first half-year 3
L. *Beginnings of Romanticism;* first half-year 3
M. *Influence of French Revolution;* second half-year 3
N. *Tennyson and Browning;* first half-year 3
O. *English Prose;* second half-year 3
P. *Old English;* first half-year 3
Q. *Béowulf;* second half-year 3

ORATORY.—(Page 35.)

B. *Advanced Oratory* 1
C. *Forensics;* first half-year 3
D. *Extempore Speaking;* first half-year 1

GERMAN.—(Page 36.)

C. *Schiller and Goethe;* first half-year 2
D. *Lessing and Goethe;* second half-year 2
E. *History of German Literature* 1
F. *The Nibelungenlied* 2
G. *Middle High German;* one half-year 3
H. *Gothic* 2
I. *Faust* 2
K. *Poetry of Goethe and Schiller* 2

FRENCH.—(Page 37.)

C. *Classic Period;* first half-year 2
D. *Nineteenth Century Literature;* second half-year 2
E. *Molière* 2
F. *Critical Study of a Classic Author;* first half-year 2
G. *Lyric Poetry;* second half-year 2
H. *Old French* 2

SPANISH.—(Page 38.)

A. *Elementary Course* 3
B. *Advanced Course* 2

ITALIAN.—(Page 39.)

A. *Elementary Course* 3

ECONOMICS.—(Page 39.)

B. *Charities and Crime;* first half-year 3
C. *Money and Banking;* second half-year 3
E. *Colonial Policy;* second half-year 2

POLITICAL SCIENCE.—(Page 40.)

A.	*Historical Politics;* first half-year	3
B.	*Comparative Politics;* second half-year	3

HISTORY.—(Page 41.)

A.	*English*	2
B.	*American* first half-year	2
	American second half-year	3
C.	*The Napoleonic Era;* second half-year	2

MATHEMATICS.—(Page 41.)

B. (1)	*Analytical Geometry* (elementary); first half-year	3
B. (2)	*Analytical Geometry* (more advanced); second half-year	3
C.	*Calculus, Differential and Integral;* first half-year	3
	Calculus, Differential and Integral; second half-year	4
D.	*History and Logic of Mathematics;* one half-year	2
E.	*Modern Methods in Geometry;* one half-year	3
F.	*Theory of Equations;* one half-year	3
G.	*Elementary Theory of Functions;* one half-year	3
H.	*Elements of Substitution Groups;* one half-year	3
I.	*Elementary Surveying;* second half-year	3

ASTRONOMY.—(Page 42.)

A.	*Elementary Astronomy;* first half-year	3
B.	*Observations and Computations;* second half-year	4
C.	*Mathematical Astronomy*	2
D.	*Meteorology;* second half-year	2

PHYSICS.—(Page 42.)

C. (1)	*Theoretical Physics*	2
C. (2)	*Theoretical Physics* (advanced)	2
D.	*Practical Physics*	2
E.	*Lectures on Advanced Physics*	1
F.	*Seminary*	1

CHEMISTRY.—(Page 43.)

C.	*Qualitative Analysis;* first half-year	3
	Qualitative Analysis; second half-year	6
D.	*Quantitative Analysis*	4
E.	*Organic Chemistry*	4
F.	*Theoretical Chemistry*	3

BIOLOGY.—(Page 45.)

A.	*Elementary Biology*	3
B.	*Cryptogamic Botany;* first half-year	2
	Cryptogamic Botany; second half-year	3

C.	*Zoology;* second half-year	3
D.	*Comparative Anatomy of Invertebrates;* first half-year	3
E.	*Comparative Anatomy of Vertebrates;* second half-year	3
F.	*Histology;* first half-year	3
H.	*Embryology;* second half-year	3

GEOLOGY.—(Page 46.)

A.	*Inorganic and Organic Geology*	4
B.	*Mineralogy;* first half-year	4
C.	*Advanced Mineralogy;* second half-year	2
D.	*Crystallography;* first half-year	2
E.	*Economic Geology;* first half-year	4
G.	*Vertebrate Palæontology;* second half-year	3
H.	*Petrography;* second half-year	3

BIBLE STUDY.—(Page 49.) 1

THEORY OF MUSIC.—

Harmony	2
Counterpoint	2

A student for any degree is usually permitted, further, to take as an elective any study required for another degree that does not appear in the course required for his own degree, and that does not introduce a conflict of hours. But, for this purpose, French A counts as three hours only, German A as four hours.

DEPARTMENTS OF INSTRUCTION.

A more detailed account of the different branches of study included in the College curriculum will be found below:

PHILOSOPHY.

PRESIDENT SLOCUM, ASSISTANT PROFESSOR LANCASTER.

The required work in this department extends over the whole of the Junior and Senior years, and gives the student a knowledge of the development of thought in the several departments of philosophy. The various Seminary courses afford training in the study and discussion of important psychological, sociological and ethical questions.

A. *Psychology*—3 hours.

1. *Neurology.*—Lectures on the brain and nervous system, with careful dissections, by the class, of brains of animals, and study of human brains. 8 weeks.— DR. LANCASTER.

2. *Animal Intelligence.*— Lectures, reading of Romanes, Morgan, Binet and others. A study of comparative neurology of animals, with a thesis by each member of the class on the nervous development of some species of animal, compared with the habits and environment of the same animal. 6 weeks.—DR. LANCASTER.

3. *Experimental Psychology.*—Lectures, recitations and experiments, based on Sanford's *Handbooks*. 4 weeks.—DR. LANCASTER.

4. *General Psychology and Logic.*— James' *Principles of Psychology*, *Briefer Course*, recitations, lectures, parallel readings and observations. Jevon's *Elementary Lessons in Logic*, studied under Psychology in connection with Reason. Second half year.—DR. LANCASTER.

   Lectures:

   (*a.*) Introductory Series.—PRESIDENT SLOCUM.
   (*b.*) Cerebral Localization and the Relation of Thought to Brain Activity. Four Lectures. —DR. J. T. ESKRIDGE.

5. *Psychological Laboratory.*—Opportunity will be afforded for the conducting of experiments in special lines.

B. *Psychological Seminary.* — The leading subjects in Modern Psychology. Theses and Discussions. Study of the following subjects: The Relations of Mind and Body; Double Consciousness; Animal Psychology; The Psychology of Defectives; Mental Evolution in Man; Unconscious Cerebration; Diseases of the Memory; Diseases of the Will; Dreams; The Psychology of Music; Hallucinations; Power of Suggestion; Aphasias; Muscle Memory; Psychology of Fear; Hypnotism; Sanity and Insanity; Genius. Each student is also required to select some one subject for independent study and investigation during the year. 1 hour.—DR. LANCASTER.

C. *History of Philosophy.*—First half-year, 4 hours.—PRESIDENT SLOCUM.

1. Lectures, recitations and conferences, 3 hours.

   (a.) Study in Comparative Religions.

   (b.) Greek Philosophy. Twenty Lectures.

   (c.) Modern Philosophy. Fifteen lectures. (1) The Rise and Fall of Scholasticism; (2) The Beginnings of Modern Philosophy—Bacon and Descartes; (3) Spinoza; (4) Locke; (5) The Sceptical Movement in France; (6) Leibnitz; (7) Berkeley; (8) Hume; (9) Kant, the Critique of Pure Reason; (11) Kant, the Transcendental Element in his Philosophy; (12) Hegel; (13) Schopenhauer; (14) Lotze; (15) Spencer—The Philosophy of Evolution.

2. *Metaphysical Seminary.*—1 hour.

   Presentation of papers and discussion of the following subjects:

   (a.) The Great Religions of the World.

   (b.) The Psychological Basis of Religious Faith.

   (c.) The Psychological Basis of Æsthetics.

   (d.) Philosophical Thought in England During the Nineteenth Century.

   (e.) Evolution: Its History, Development and Results.

D. *Ethics.*—Second half-year, 4 hours.—PRESIDENT SLOCUM.

1. *Janet's Theory of Morals.* Lectures, theses and discussions. 3 hours.

   Lectures:

   (a.) The Fundamental Principles of Ethics. 12 lectures.

   (b.) Christian Ethics. 3 lectures.

2. *Ethical Seminary.*—1 hour.

   Presentation of papers and discussions upon the following subjects:

   (a.) Modern Social and Sociological Problems.

   (b.) The Ethical View of Citizenship.

   (c.) A Study of Educational Theories from an Ethical Standpoint.

E. *Modern German Philosophy.*—First half of Senior year, 2 hours.—PRESIDENT SLOCUM.

F. *The Philosophical Movement in England.*—Second half of Senior year, 2 hours.—President Slocum.

G. *Advanced Logic.* — Second half-year, 2 hours.—President Slocum.

H. *Lotze.*—Second half-year, 2 hours.—President Slocum.

I. *Seminary in Social Ethics.*—The Labor Question, Temperance, Pauperism and other social problems considered from an ethical standpoint. Second half-year, 1 hour.

J. *Seminary in Greek Philosophy.*—One half-year, 1 hour.

K. *Evolution of Religious Thought.*—Second half-year, 2 hours.—Mr. Hastings.

PEDAGOGY.

Assistant Professor Lancaster.

A. *History and Philosophy of Education.*—The recent educational developments in Europe and America. Study of educational reformers, school systems and curricula. Lectures, reading and conferences. First half-year, 2 hours.

B. *School Hygiene and Child Study.*—Hygiene of the senses, fatigue, child and adolescent psychology, problems of the school-room and of practical teaching. Lectures, reading and discussion. Second half-year, 2 hours.

C. *Original Observations in Psychological and Pedagogical Fields of Study.* 1 hour.

D. *Pedagogical Seminary* — Reports and discussions of research work. 1 hour.

Courses A, B, and C may be taken by correspondence.

Note—Special courses will be given if called for. Several such courses are being given this year.

GREEK.

Professor Gile, Assistant Professor Noyes and Mr. Brehaut.

A. Homer, selections from the *Odyssey* and *Iliad* in the original and all the poems in translation; Plato, *Apology* and *Crito;* Herodotus, Selections. 3 hours.

B. *Greek Drama.*—Æschylus, *The Septem* and *Prometheus;* Sophocles, *Antigone;* the remainder of Æschylus' and Sophocles' plays in translation; Euripides, *Alcestis* and *Medea.* 3 hours.

C. *Greek History.*—(*a.*) Herodotus; careful study of the period of the Persian Wars. Reading from the dramatists for further illustration of the life of the period; or, (*b.*) Thucydides, the Sicilian Expedition. Parallel readings in Curtius, Grote and other modern historians. Selections from Plutarch's Lives. One half-year, 3 hours.

D. *Greek Philosophy.*—Plato, *Phaedo.* Selections from other dialogues, and from the works of Xenophon. Zeller's *Socrates and the Socratic Schools.* One half-year, 3 hours.

E. *Greek Epic and Lyric Poetry.*—Homer, Hesiod and Pindar. One half-year, 3 hours.

F. *A Course Designed for Teachers.*—Selections from Xenophon; composition; careful grammatical study. One half-year, 3 hrs.

G. *Greek Architecture and Sculpture.*—Tarbell's *History of Greek Art,* with supplementary readings. Second half-year, 1 hr.

LATIN.

PROFESSOR GILE AND MR. BREHAUT.

A. Livy, *Bk. XXII*; Cicero, *De Senectute*, *De Amicitia*; Pliny, *Selected Letters;* Horace, *Odes.* 3 hours.

B. Horace, Selections from the *Epistles* and *Satires;* Tacitus, *Germania* and *Agricola;* Terence, *Phormio;* Plautus, *Captivi;* Cicero, *Selected Letters.* 3 hours.

C. *Drama.*—Selected plays of Plautus and Terence; history and characteristics of the Roman Drama. One half-year, 3 hours.

D. *Elegiac Poetry.*—Catullus, Tibullus, Propertius, and Ovid. The authors will be studied from a literary point of view. One half-year, 3 hours.

E. *Satire.*—History and characteristics of Roman satire. Selections from Horace, Persius, Petronius, Juvenal. Parallel readings in English Literature. One half-year, 3 hours.

F. *Roman Life.*—Manners, morals, politics and religion under the late Republic and the Empire. Cicero, *Selected Letters*; Petronius, *Cena*; Pliny, *Selected Letters;* Martial, *Selected Epigrams;* reports on special topics. 3 hours.

G. *Vergil.*—The *Aeneid*, Books VII-XII; the *Bucolics*, and Selections from the *Georgics*. One half-year, 3 hours.

H. *A Course Designed for Teachers.*—Selections from Cæsar and Cicero; composition; careful grammatical study. One half-year, 3 hours.

ENGLISH.

PROFESSOR PARSONS, ASSISTANT PROFESSOR NOYES, MR. PATTISON.

A. *English Words.*—Required of Freshmen. First half-year, 1 hour.

B. *Rhetoric and Composition.*—Written exercises and conferences. Required of Freshmen. First half-year, 2 hours; second half-year, 1 hour.

C. *English Composition.*—Advanced course. Required of Sophomores. First half-year, 3 hours.

D. *American Literature.*—Irving, Cooper, Poe, Bryant, Hawthorne, Longfellow, Emerson, Lowell, Holmes, Whittier. Required of Sophomores. Second half-year, 3 hours.

E. *Early English Literature.*—A rapid survey, from the Anglo-Saxon Conquest to Milton. First half-year, 3 hours.

F. *Middle English.*—A study of the development of the English language and literature in the twelfth and thirteenth centuries. Second half-year, 3 hours.

G. *Chaucer and Spenser.*—The principal poems read critically in class. Life and thought of the times. First half-year, 3 hrs.

H. *The English Drama.*—Principles and development, to the close of the Elizabethan period (omitting Shakespeare). First half-year, 3 hours.

I. *The English Drama: Shakespeare.*—The principal plays read rapidly, with special attention to the development of the author's genius. Second half-year, 3 hours.

J. *Shakespeare.*—A critical text study of three dramas of Shakespeare. The class meets once a week for a two-period session. In 1900-1901 King Lear, Julius Caesar and Hamlet are studied. PROFESSOR AHLERS.

K *Milton.*—A comprehensive study of the poet's personality and work. First half-year, 3 hours.

L. *Beginnings of Romanticism in English Poetry.*—From the Restoration to the French Revolution. First half-year, 3 hours. Elective for Seniors.

M. *Influence of the French Revolution in English Poetry.*—Authors studied: Wordsworth, Coleridge, Shelley and Byron. Second half-year, 3 hours. Elective for Seniors.

N. *Tennyson and Browning.*—Elective for Seniors. First half-year, 3 hours.

O. *English Prose.*—Hooker to Ruskin. A survey of the evolution of modern English prose and a study of some of the most characteristic English prose writers. Elective for Seniors. Second half-year, 3 hours.

P. *Old English.* The beginnings of English literature. Reading is begun at once and the study is made as literary in character as possible. First half-year, 3 hours.

Q. *Old English.* Béowulf. Course P. prerequisite. Second half-year, 3 hours.

ORATORY.

Mr. Ritchie.

A. *Oratory.*—The work is based upon the study and delivery of masterpieces. Special attention is given to the fundamentals of public speaking. Required of Freshmen. Second half-year, 2 hours.

B. (1) *Advanced Oratory.*—This course includes the study and expression of higher forms of literature, together with original composition. The preparation and delivery of two orations will be given prominence. 1 hour.

B. (2) Similar to B (1), but adjusted to meet schedule requirements of Ph. B. Sophomores. Second half-year, 2 hours.

C. *Forensics.*—The nature of evidence, argumentation, brief drawing, the delivery of argument. First half-year, 3 hours.

D. *Extempore Speaking.*—Current topics are discussed. Emphasis is laid upon brevity and directness. First half-year, 1 hour.

GERMAN LANGUAGE AND LITERATURE.†

PROFESSOR AHLERS.

A. *Elementary Course*—Joynes-Meissner's *Grammar.* Anderson, *Maerchen;* Storm, *Immensee;* Hauff, *Das kalte Herz; Die Karavane;* Eichendorff, *Aus dem Leben eines Taugenichts* 4 hours. PROFESSOR AHLERS and ASSISTANT PROFESSOR SMITH.

B. *Intermediate Course.*—Riehl, *Fluch der Schoenheit;* Jensen, *Die braune Erica;* Chamisso, *Peter Schlemihl;* Heine, *Harzreise;* Gerstaecker, *Germelshausen;* Lessing, *Minna von Barnhelm;* Schiller, *Wilhelm Tell*, *Lyrics* and *Ballads.* Dictation. Von Jagemann's *Frose Composition and Syntax.* 4 hours.

C. Schiller, *Maria Stuart*, *Die Jungfrau von Orleans;* Goethe, *Egmont;* Sime's *Life of Goethe.* Dictation. First half-year, 2 hours.

D. Lessing, *Emilia Galotti*, *Nathan der Weise;* Rollestone's *Life of Lessing;* Goethe, *Iphigenie.* Dictation. Second half-year, 2 hours.

E. An outline of the History of German Literature. This course is conducted in English, and is open to all College students, whether they are taking German or not. Kuno Francke's *Social Forces in German Literature* will be used as a text-book. This reading will be supplemented by twelve lectures. 1 hour.

F. The *Nibelungenlied* and the Classic Period of the Twelfth Century. *Hartmann von Aue*, *Wolfram von Eschenbach*, *Gottfried von Strassburg.* Lectures and collateral reading. 2 hours.

G. *Middle High German.* — Braune-Paul's *Mittelhochdeutsche Grammatik; Nibelungenlied; Kudrun; Walter von der Vogelweide.* One half-year, 3 hours; a fourth hour at the discretion of the instructor.

H. *Gothic.*—Braune's *Gotische Grammatik;* Heyne's *Ulfilas.* 2 hours.

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†Authors and books designated under German A, B, C and D indicate the scope rather than the actual works read in these courses.

I. *The Faust-legend and its Development, and Goethe's Faust.* Synopsis of the Course:

CHAPTER I. Kindred Legends before the 16th Century. (*a.*) Simon Magus. (*b.*) Ahasuerus. (*c.*) Anthemios, Proterius and Theophilus. (*d.*) Cyprianus Antiochus. (*e.*) Tannhaeuser and Don Juan.

CHAPTER II. The historic Faust; the "Faustbuch" of 1587 and its development; the "Puppenspiele."

CHAPTER III. Faust Dramas before the 18th Century.
(*a.*) Calderon's El Magico Prodigioso.
(*b.*) Marlowe's Tragical History of Dr. Faustus.

CHAPTER IV. Faust in the 18th Century.
Lessing's Fragment; Maler Mueller, Klinger, etc.

CHAPTER V. Goethe's Faust.
(*a.*) The "Urfaust."
(*b.*) Faust, Part I, 1808.
(*c.*) Faust, Part II.

This course is conducted entirely in German. The class meets once a week for a 2-hour period. Open to the public.

K. *The Poems of Goethe and Schiller.*—This course is conducted entirely in German. The class meets once a week for one and a half hours. Open to the public.

FRENCH LANGUAGE AND LITERATURE.

ASSISTANT PROFESSOR SMITH.

A. *Elementary Course.*—French prose and grammar. Edgren's *French Grammar;* Rollin's *Reader;* Halévy, *Un Mariage d'Amour, L'Abbé Constantin;* Erckmann-Chatrian, *Les Fiancés de Grinderwald, Madame Thérèse.* Reading at sight. 4 hours.

B. *Intermediate Course.*—Modern fiction and plays. Dictation and composition. Much ground is covered and especial attention paid to pronunciation. The class is conducted largely in French. Among others, the following books are read: Sand, *La Mare au Diable;* Hugo, *Bug Jargal;* Dumas, *La Tulipe Noire;* Feuillet, *Le Roman d'un Jeune Homme Pauvre;* Merimée, *Colomba;* Greville's *Dosia;* Molière, *Le Medecin Malgré Lui;* Corneille, *Le Cid;* Racine, *Athalie.* 4 hours.

C. *Classic Period.* Representative plays of the great classical dramatists are read. Much pronouncing is done; very little translation. Students do outside reading, and hand in written reports. A series of lectures on the history of the French theatre is given. This course is conducted entirely in French. First half-year, 2 hours.

D. *Nineteenth Century Literature.*—A series of lectures on the development of Romanticism in French Literature; some of the plays read are Hugo's *Hernani*, *Ruy Blas;* two comedies of de Musset; de Bornier's *La Fille de Roland;* Pailleron's *Le Monde où l'on s'ennuie;* Rostand's *Cyrano de Bergerac.* Prose Romance, de Vigny's *Cinq Mars.* Second half-year, 2 hours.

E. *Comedies of Molière.*—The more important comedies of Molière will be read by the instructor. Lectures on Molière and his time. Students desiring this course must consult the instructor. Two consecutive hours each week. PROFESSOR AHLERS.

F. *Critical Study of a Classic Author.*—Next year Bossuet's *Oraisons Funèbres* and Pascal's *Lettres Provinciales* will be studied. Course conducted in French. First half-year, 2 hours.

G. *French Lyric Poetry.*—Study of its development, versification, and forms of verse. Course conducted in French. Second half-year, 2 hours.

H. *Old French.*—Constans' *Chrestomathie*, and part of *Aliscans* and *Raoul de Cambrai* will be read. A series of lectures on subjects of Old French Literature will be given, and some elementary principles of French phonetics treated. For conditions of admission, see instructor. 2 hours.

SPANISH.

ASSISTANT PROFESSOR SMITH.

A. *Elementary Course.*—Edgren's *Spanish Grammar*, Ramsey's *Reader*, modern prose writers. Students begin reading at once, and as soon as possible pronounce without translating. 3 hours.

B. Intended for those who have had Spanish A or a similar course. Some of the works of Cervantes, Lope de Vega, Calderon, etc., will be read. Composition and letter writing. 2 hours.

ITALIAN.

Assistant Professor Smith.

A. A course in Italian will be given similar to that of Spanish A, and the same methods employed. Grandgent's Italian Grammar is used. Much reading will be done. Among other works will be read Silvio Pellico's *Le Mie Prigioni*, Farina's *Il Signor Io*, and Dante's *La Vita Nuova*. 3 hours.

ECONOMICS.

Professor Urdahl.

The instruction in this department consists of a systematic course in the elements of Political Economy, required of all students, followed by elective courses in special subjects. Course A is a prerequisite to any of the elective courses, except F.

A. *Elements of Political Economy.*—Required of Juniors. Text: Ely's *Outlines of Economics*. First half-year, 4 hours.

B. *Charities and Crime.*—The theory and history of charity and reformatory work. Students are encouraged to study the charitable and correctional institutions in the vicinity of their own homes. Text: Warner's *American Charities*. If possible, additional lectures by men who have devoted special attention to some phase of these subjects. First half-year, 3 hours.

C. *Money and Banking.*—An historical and theoretical course in money and banking, treating especially the production of the metals, the theory of value, the history of prices, bimetallism, paper money, bank notes, etc. Lectures, recitations, reports and discussions. Text: Scott's *Money and Banking*. This course alternates with D. Second half-year, 3 hours.

D. *Socialism.*—An historical and critical course in socialism and socialistic theory. Especial attention is paid to the historical basis of socialism, the French revolution, the idealists, the German scientific socialists, the Christian socialists, the State socialism of to-day, and also to the various attempts at socialistic reforms. Lectures and recitations. Text: Ely's *French and German Socialism*. (Not given in 1901-02.)

E. *Economic Colonial Policy.*—The theories of colonization and the economic ideas and institutions underlying the modern expansionist movement; a brief history of the colonial experiments of the great colonizing nations of the world: Spain, Portugal, Holland, France, England and Germany. Lectures supplemented by outside reading. Second half-year, 2 hours.

F. *Economic History*—The industrial history of England. (Not given in 1901-02.)

G. *Public Finance.*—Taxation, public expenditure, public debts and the budget. Lectures with collateral reading. Text: Adam's *Finance.* This course will alternate with B. (Not given in 1901-02.)

POLITICAL SCIENCE.

Professor Urdahl.

Two courses are offered in Political Science: an historical course showing the broad political features of the various historical forms of government and a comparative study of the chief existing English governments. Notice also the course in Socialism, described under the department of Economics.

A. *Historical Politics.*—The origin and growth of government from its primitive forms to the establishment of the modern states; the semi-amorphous horde, gentile society, the ancient city, the Athenian Democracy, Greek Confederations, the Roman Republic and Empire, the Germanic folk, the feudal system, the political system of the Church, the Holy Roman Empire, the rise of national states, the development of absolute and constitutional monarchy, the growth of democracy, etc. Lectures, supplemented by recitations and reports. Text: Wilson's *State.* First half-year, 3 hours.

B. *Comparative Politics and Constitutional Law.* A study and comparison of the governments of the chief modern states: an exposition of the constitutional law of the United States and England and of their actual political organization. The great problems of federalism and centralization, presidential and responsible ministerial government, colonial government and civil liberty, receive especial consideration. Lectures, recitations and collateral reading. Text: Bryce's *American Commonwealth.* Second half-year, 3 hours.

HISTORY.

Professor Urdahl.

The student is also referred to Political Science A *(Historical Politics)* and to Economics F *(English Industrial History)*. Historical courses amounting to two hours a week for one year, must be included in the elective work of each student.

A. *English History.* The political history of England from the earliest times to the American Revolution. Recitations and collateral reading, supplemented by lectures on the constitutional and economic development. Text: Gardiner's *Student's History of England.* 2 hours.

B. *American History.* A general survey, with emphasis on political and economic history. Course A is recommended as a preparation. In special cases the course may be elected for one half-year.

(a.) First half-year: To the close of the Revolution. 2 hours.

(b.) Second half-year: From the Revolution to the present time. 3 hours.

C. *The Napoleonic Era and Modern Times.* The history of Western Europe in the nineteenth century. Second half-year, 2 hours.

MATHEMATICS.

Professor Cajori and Professor Loud.

A (1). *Algebra.*—Series; the Binomial Theorem; Logarithms; Undetermined Coefficients; Theory of Equations. 4 hours till Christmas.

A (2). *Solid and Spherical Geometry.*—Planes and Lines in Space; Polyhedra, the Cylinder, Cone and Sphere; Spherical Triangles. Second half-year, 2 hours.

A (3). *Plane Trigonometry.*—The functions of one and two angles; the solution of triangles; simple applications. 4 hours during January. Second half-year, 2 hours.

A (4). *Spherical Trigonometry.*—Second half-year, 1 hour.

B (1). *Analytical Geometry (Elementary).*—Plane Loci of first and second order. First half-year, 3 hours.

B (2). *Analytical Geometry (More advanced).*—More thorough study of plane loci, some attention being given to modern methods. Second half-year, 3 hours.

C. *Calculus, Differential and Integral.*—First half-year, 3 hours; second half-year, 4 hours.

D. *History and Logic of Mathematics.*—This course is planned especially for those who are fitting themselves to be teachers of Mathematics. One half-year, 2 hours.

E. **Modern Methods in Geometry.*—One half-year, 3 hours.

F. **Theory of Equations.*—One half-year, 3 hours.

G. **Elementary Theory of Functions.*—One half-year, 3 hours.

H. **Elements of Substitution Groups.*—One half-year, 3 hours.

I. *Elementary Surveying.*—Field work and computation. Second half-year, 3 hours.

*Of courses E, F, G and H, only two are given in any one year.

ASTRONOMY.

PROFESSOR LOUD.

A. *Elementary Astronomy.*--The descriptive, rather than the mathematical side of Astronomy, is emphasized. First half-year, 3 hours.

B. *Observations and Computations.*—A continuation of course A. The student is expected to make free use of the telescope. Second half-year, 4 hours.

C. *Mathematical Astronomy.*—Planetary Orbits, etc. 2 hours.

D. *Elementary Meteorology.*—Second half-year, 2 hours.

PHYSICS.

PROFESSOR SHEDD.

ELEMENTARY COURSES.—Prerequisite: 1 year *Preparatory Physics* and *Plane Trigonometry.*

A. *General Physics.*—Lectures, Recitations and Laboratory Work covering the ground work of Physics. 4 hours.

First half-year: Mechanics, Heat, Electro-Statics, Magnetism.

Second half-year: Electro-Kinetics, Electro-Magnetism, Sound, Light.

B. Same as Physics A, with the addition of problem work. Required of Sophomores in S. B. course. 5 hours.

ELECTIVE COURSES.—Prerequisites: A or B; a knowledge of the calculus is desirable.

C. (1). **Theoretical Physics.*

First half-year: Theory of Heat. 2 hours.
Second half-year: Theory of Light. 2 hours.

C. (2.) **Theoretical Physics.*

First half-year: Theory of Electricity and Magnetism. 2 hours.
Second half-year: Applications to Electromagnetic Machinery, or Elements of Alternating Currents. 2 hours.

D.† *Practical Physics.*—Laboratory Work: Determination of Physical Constants in Mechanics, Heat, Electricity and Magnetism. Problems in Light and Sound. 2 hours.

E. *Lectures on Advanced Physics* Prerequisites: The Calculus and course C or D. 1 hour.

First half-year: Physical Constants and Instruments of Precision.
Second half-year: Magnetism and the Magnetic Circuit.

F. Seminary of Current Literature. 1 hour.

In Courses A and B a laboratory fee of $1.00 per half-year will be charged. In Course D no laboratory fee will be charged except in case of material consumed.

*Courses C (1) and C (2) will not be given the same year.
†Course D must be taken with courses C (1) or C (2).

CHEMISTRY.

PROFESSOR STRIEBY AND MR. LAMB.

A. *Elementary Chemistry.*—Text-book work (chiefly Inorganic Chemistry) supplemented by lectures and discussions upon the fundamental laws of chemistry, the application of chemistry to sanitary science, medicine and some of the arts, and also by occasional papers from descriptions in technical books, and by reports of visits to metallurgical and manufacturing establishments. The experimental work is thorough and exacting. Remsen's *Introduction to the Study of Chemistry.* 4 hours' recitation and 4 hours' laboratory work (counts 4 hours).

B. *Advanced Chemistry.*—This course gives a general knowledge of chemistry. The second term is devoted mainly to Organic Chemistry. The chief theories and laws are studied with reference to the explanation of chemical phenomena. The practical application of chemistry in the arts, and its uses in the sanitary regulation of daily life and work, are brought prominently forward. Abstracts from books on chemical technology and sanitary science and discussions upon recent discoveries and applications of chemistry will occasionally take the place of the usual recitation. The work in the laboratory comprises short courses in Qualitative and Quantitative Analysis and the preparation of inorganic and organic compounds. 4 hours recitation or lectures and 5 hours of laboratory work.

C. *Qualitative Analysis.*—Prerequisite: Chemistry A or equivalent. Experimental drill in obtaining characteristic reactions of the more common elements, study of empirical formulæ and symbolic expression of reactions, solution of substances, separation of groups of elements, and finally analysis—first of simple salts, and later of complex mixtures. The analytical work is confined almost wholly to inorganic substances but includes certain common organic acids and a few organic bodies of general and medicinal use. First half-year, 6 hours (counts 3); second half-year, 12 hours (counts 6).

D. *Quantitative Analysis.*—Prerequisite, Chemistry C. The laboratory work comprises determinations of single elements by approved methods, gravimetric and volumetric, followed by the analysis of selected salts, ores, slags, mineral water and commercial products. A few rapid or commercial determinations are given as the final work. The lectures treat of the methods of analysis, properties of precipitates, stoichiometry, sampling, reporting and the theory of solutions. The laboratory work occupies 3 consecutive hours 4 days a week (counts 4 hours). Cairns' *Quantitative Analysis.*

E. *Organic Chemistry*—Prerequisite, Chemistry A or B Remsen's *Organic Chemistry.* Lectures and discussions of special subjects and processes. 4 hours recitations and 4 hours laboratory work (counts 4 hours).

F. *Theoretical Chemistry.* — Prerequisite, Chemistry B. Textbook work with lectures and oral and written discussions. 3 hours.

The fee for every course must be paid in advance. It covers the cost of gas, chemicals and non-returnable supplies, except platinum. Glassware and necessary apparatus (except platinum vessels) are loaned to the student and must be returned in good condition. The fees are as follows:

Preparatory course	$4 00
Chemistry A	5 00
Chemistry B	6 00
Chemistry C	15 00
Chemistry D	15 00
Organic Chemistry	15 00

BIOLOGY.

Assistant Professor Brookover.

A. *Elementary Biology.*—Morphology of grasshopper; comparative work on at least two other insects; Crayfish and Cyclops; three Protozoans: Amoeba, Vorticella and Paramecium; Fresh Water Algae; Yeast, Moulds and other Fungi; life of Fungi contrasted with that of Algae; fundamental differences between plants and animals; the Cell, Elementary Embryology, and Origin of Species; dissection of Sponges, Hydra, Starfish and Clam; Moss and Liverwort or Fern; histology of tissues of flowering plants; dissection of a Vertebrate. Note books and drawings are made. Laboratory fee, $1. 6 hours of laboratory work with occasional lectures (counts 3 hours).

B. *Cryptogamic Botany.*—Advanced study of non-flowering plants, following for laboratory guide Arthur, Barnes and Coulter's Plant Dissection. Laboratory work with occasional recitations and quizzes. Coulter's Plants. References: Sachs, De Bary, Bessey and others. Elementary Biology is prerequisite. First half-year 2 hours; second half-year 3 hours.

C. *Zoology.*—A course designed to afford a comprehensive knowledge of the animal kingdom. The needs of students who expect to take Geology A are kept constantly in mind, and the time is chiefly devoted to systematic zoology. With this is included some work in distributional zoology and phylogeny; and the systematic study is followed by a brief consideration of the general principles of zoology. Recitations and lectures. Packard's *Zoology* and Hertwig's *Principles*. 3 hours second half-year.

D. *Comparative Anatomy of Invertebrates.*—Mainly laboratory work, with references. Zoology is prerequisite. First half-year, 3 hours.

E. *Comparative Anatomy of Vertebrates.*—Laboratory work, with occasional quizzes. References to standard authors. Zoology is prerequisite. Second half-year, 3 hours.

F. **Histology.*—Practical work in preparation of tissues for microscopical slides; examination and drawing of histological mounts. Laboratory guide, Stohr, Stirling or Piersol. Laboratory fee, $2.50. First half-year, 6 hours (counts 3 hours).

G. **Physiology.*—Prerequisites, elementary courses in Biology, Chemistry and Physics. Laboratory work 2 or 3 hours, and 2 recitations (count 3 hours), second half-year. Thornton's Human Physiology; references to Foster, Flint, Martin. The library of the El Paso County Medical Association is available. Laboratory fee, to cover actual cost of material.

H. **Embryology.*—Prerequisites, Biology or Zoology; Comparative Anatomy if possible. Preparation of mounts; drawing from slides; comparative work on frog and other animals. Foster and Balfour's Elementary Embryology of the Chick. Laboratory fee, $2.50. Second half-year, 5 laboratory hours, 1 lecture or recitation hour (counts 3 hours).

I. **Bacteriology.*—Laboratory practice in preparation of culture media and technique of obtaining pure cultures from different sources. Laboratory guide and Strenberg's Manual of Bacteriology. Laboratory fee to cover actual cost of material. First half-year, 2 or 3 hours.

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*Intended primarily for students expecting to study medicine. Physiology and Bacteriology will not be offered in 1901-02.

GEOLOGY.

Professor Cragin.

The study of Geology is peculiarly attractive in the vicinity of Colorado Springs. Few localities present strata of so many geological ages or so varied an assemblage of rock and mineral species. Fossils of systems as early as the Cambrian and as late as the Quaternary occur within a radius of six miles of the College. Veins, dikes, faults, caves, flood-plains, river-erosion, sand-carving and the results of orogenic and glacial action are all well illustrated near at hand.

To this wealth of geological illustration the College Museum and a collection of lantern slides add many instructive specimens and views. The equipment of the geological laboratory includes a Fuess petrographical microscope, apparatus for the polishing of rock sections, a series of microscopic rock sections, some of the more important atlases of petrography, a relief model of the Pike's Peak region (donated by the Colorado Springs High School), charts of stratigraphical geology and palæontology, a map showing the distribution of the mineral resources of Colorado, and other useful apparatus. A large series of geological and topographical maps and atlases of the United States, Colorado, etc., is available for reference in Coburn Library.

A. *Geology.*—Recitations, special exercises and excursions to points of geological interest. In the first half-year Dynamical, Structural and Physiographical Geology are studied; in the second, Historical Geology. Text book: Scott's *Introduction to Geology*, supplemented by the works of Le Conte, Dana, Geikie, Prestwich, etc. Prerequisite for the first half-year (Inorganic Geology), Elementary Chemistry; and for the second (Organic Geology), Biology or Zoology. Students in Structural Zoology or an allied science, who are looking forward to Geology as one of their future studies and wish to make the best preparation for it, should give as much attention as possible to the *comparative* and *systematic* side of their subject. By electing the course in Mineralogy before taking Geology, an additional and very material advantage may also be secured. 4 hours.

B. *Mineralogy.*—Advised for students who intend to elect any of the other branches of Geology along inorganic lines. This course is planned first of all to be practical. The *economic* or *ore classification* of minerals is used and the time is devoted chiefly to laboratory work in Descriptive and Determinative Mineralogy. Only enough Crystallography is given to enable the student to understand the general relations of crystals and apply the terms of form and cleavage used in determinative tables. Text-books: Moses and Parsons' *Mineralogy, Crystallography and Blowpipe Analysis* and Crosby's *Tables for the Determination of Common Minerals*. Reference-books: Dana's *Text-book of Mineralogy*, Cornwall's *Blowpipe Analysis*, Brush and Penfield's *Determinative Mineralogy*, etc. There is a laboratory fee of two dollars, covering use of gas, minerals and certain other supplies. Uniform

individual working outfits, consisting of blowpipe, platinum forceps, platinum wire, test-tubes, acids, fluxes, etc., complete, except for items used as general laboratory equipment, are furnished at cost. First half-year, 4 hours.

C. *Advanced Mineralogy.*—Prerequisite: *Geology B.* A laboratory course arranged to enable students who so desire to continue the practical work of course *B* and become acquainted with a more extended line of minerals. Text and Reference books: those of *Geology B*, together with Dana's *System of Mineralogy*, *Supplement*, etc. There is a laboratory fee of one dollar. Second half-year, 2 hours.

D. *Crystallography.*--Recitations and laboratory work. Text-book: Williams' *Elements of Crystallography*, supplemented by the crystallographic part of Brush and Penfield's *Determinative Mineralogy.* First half-year, 2 hours.

E. *Economic Geology.* Recitations; examination of useful minerals and rocks, and of products derived from them; visits to geological localities of especial economic interest, and to industries based on geologic resources; preparation of papers and discussions upon assigned topics. Text-book: Tarr's *Economic Geology of the United States.* Geology A is a prerequisite; Mineralogy an important aid. First half-year, 4 hours.

F. *Invertebrate Palæontology.*—Recitations and laboratory study of fossils of principal groups, preceded in part by a study of recent forms of the same or allied groups. Zittel's *Text-book of Palæontology*, *Volume I.* The student is also guided in the use of other important literature on the subject. Zoology is a prerequisite. Second half year, 3 hours. (Not given in 1901-02.)

G. *Vertebrate Palæontology.*—Recitations and laboratory studies in the Comparative Osteology, Taxonomy and Evolution of the Vertebrata. The student makes use of the general works and monographs of Reynolds, Zittel, Huxley, Cuvier, Leidy, Cope, Marsh, Osborn, Scott, etc. Zoology is a prerequisite. Second half year, 3 hours.

H. *Petrography.*--An elementary course in the Microphysiography of Rock-components. Recitations and laboratory work. Luquer's *Minerals in Rock-Sections.* Prerequisites: Mineralogy, Crystallography and Physics. Second half-year, 3 hours.

BIBLE STUDY.

Professor Parsons.

Open as an elective to Juniors and Seniors. Freshmen and Sophomores having time to take the work will be allowed advanced credit on Junior and Senior electives. Academy students may enter the class, but will receive no credits. 1 hour a week.

The following courses are offered, which will be taken in successive years:

I. Introduction to the Books of the New Testament.
II. The Life of Christ (two years).
III. Studies in the Books of Samuel.
IV. The Life of Paul.

In 1901-1902 the class will study Course III.

PHYSICAL TRAINING.

The peculiar climate of Colorado Springs and its charming surroundings make outdoor sports possible and attractive throughout the year. Tennis is frequently played at Christmas and New Years, and baseball practice is begun as soon as the football season is over. A gymnasium equipped with the necessary appliances for the most approved methods of physical exercise, heated by steam and furnished with shower-baths, lockers, etc., serves for indoor exercises.

Physical training is required of every young woman unless excused by the College physician. Upon entrance each is given a thorough physical examination. From the data recorded an anthropometric chart is plotted, showing defects in comparison with the normal standard, and prescribing special corrective exercises where needed. From November until May class drills are held, which include military tactics, free body building, the use of apparatus and Swedish work. Tennis, battle-ball and basket ball are played, the last according to the rules adopted by the conference on Physical Training held in Springfield, Massachusetts, June, 1899, and now used by all the leading Eastern colleges. The physical instructor is Miss Elizabeth Barrows.

Football, baseball, tennis and track athletics are consolidated in the Colorado College Athletic Association. A board, consisting of three members of the Faculty—Professors Ahlers, Cajori and Smith—three representatives from the city—Messrs. W. P. Bonbright, C. H. Mallon and W. K. Jewett—and nine representatives from College and Academy, including the Captains and Coach of the teams,

controls the interests of the association. This board advises the students in all sports, audits the accounts of managers, and raises and authorizes the expenditure of money for the various athletic sports.

In 1898 the Athletic Association built, at large expense, a fine athletic park. For this purpose the natural amphitheatre in the rear of the College buildings, facing the mountains, was used. About five acres of ground were leveled and enclosed by an eight-foot fence, and a fine grand stand, with a seating capacity of 600, was erected. In 1900 a new grand stand, seating 800, was given by Mr. James F. Burns. For adaptation to its purposes, there is no more complete and satisfactory park in the West; for situation and beauty of its surroundings, it is probably unrivalled in the world.

Within fifteen minutes' walk of the college is a fine golf club, of which College students may become members. The delightful open winters of Colorado Springs make it possible to enjoy this excellent sport throughout the year.

The College has held the baseball championship in the State Intercollegiate League for the last four years, and the football championship for the last two.

HONORS.

Scholarship honors of two grades are awarded at Commencement for excellence in the work of the year. The Honor list for 1899-1900 was as follows:

HIGH HONORS.

Pearl Irene Beard, '03,
Ella Sabin Fillius, '03.
Leonard Rose Ingersoll, '02.
Henry Lacy McClintock, '03
William Percival Nash, '01.
Florence Louise Tullock, '03.

HONORS.

Grace Louise Bradshaw '01.
Cora Edith Draper, '02.
Ella Lorna Graber, '02.
Albert Chain Hardy, '03.
Edna May Jacques, '00.
Clyde Thomas Knuckey, '02.
Roy Milo McClintock, '00.
William Wallis Platt, '02.
Jeannette Ruth E. Scholz, '03.
Ralph Crane Wells, '01.
Nettie Hamlin Wise, '03.

Perkins Scholars.

Ella Lorna Graber, '02.
Leonard Rose Ingersoll, '02.

HAWLEY SCHOLARS.

Elizabeth Beatty Elliott, '01.
Anna Louise Steele, '01.
Cora Edith Draper, '02.
Osie Frances Smith, '02.

SCHEDULE OF RECITATIONS.

HRS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8:30	French A (a). German A (a). Mathematics A (a). [English G.] I. Latin.	[Economics A.] French A (a). German A (a). Mathematics A (a). [Philosophy C.] *Philosophy D.* I. Latin. III. Latin. IV. Mathematics.	[Economics A.] *Economics E.* French A (a). German A (a). Mathematics A (a). [Philosophy C.] *Philosophy D.* I. Latin. III Latin. IV. Mathematics.	[Economics A.] French A (a). German A (a). Mathematics A (a). [Philosophy C.] *Philosophy D.* I. Latin. III. Latin. IV. Mathematics.	[Economics A.] *Economics E.* [English A (a).] *Oratory A (a).* Mathematics B. [Philosophy C.] *Philosophy D.* I. Latin. III. Latin. IV. English.	[English B (a).] *Oratory A (a).* History B. Mathematics B. Spanish A. I. Latin. II. History. III. Latin. IV. English.
9:20	CHAPEL.	CHAPEL.	CHAPEL.	CHAPEL.	CHAPEL.	CHAPEL.
9:45	[English L.] *English I.* French B. German B. History A. Mathematics C. II. Latin.	Chemistry A. French B. German B. Oratory B. [Political Science A.] *Political Science B.* II. Latin.	Chemistry A. French B. German B. [Political Science A.] *Political Science B.* [English G.] I. Drawing. II. Latin.	Chemistry A. English B (a). Mathematics C. [Political Science A.] *Political Science B.* Spanish A. II. Latin. IV. Physics.	[English L.] *English I.* French B. German B. History A.	Chemistry A. [English L.] *English I.* Mathematics C. I. Drawing.
10:35	[French C.] [German C.] Greek B. Mathematics A (b). Physics A. [I. Government.] *I. History.* III. English. IV. Greek.	Chemistry A.* [English C.] Geology A. Mathematics A (b). [Pedagogy A.] *Pedagogy B.* Spanish A. III. English. IV. Greek.	Chemistry A.* [English C.] Geology A. Mathematics A (b). [Pedagogy A.] *Pedagogy B.* I. Drawing. III. English. IV. Greek.	Chemistry A.* [English C.] Geology A. Mathematics A (b). [Pedagogy A] *Pedagogy B.* II. History. IV. Greek.	[English A (b).] *Oratory A.* (b) Geology A. Greek B. [I. Government.] *I. History.* II. History. III. Drawing. IV. Physics.	Chemistry A.* [English B (b).] Greek B. *Oratory A.* (b) I. Drawing.* IV. Greek.

11:25	Chemistry B. [Economics B.] [English E.] *English F.* Latin A. I. Mathematics. III. Geometry. IV. Latin.	*Economics C.* Philosophy A. Physics A. I. Mathematics. *II. Botany.* [II. Physiology.] III. Geometry. IV. Latin.	Chemistry B. [Economics B.] Latin A. Philosophy A. I. Mathematics. *II. Botany.* [II. Physiology.] III. Geometry. IV. Latin.	*Economics C.* English B (b). Philosophy A. Physics A. I. Mathematics. *II. Botany.* [II. Physiology.] III. Geometry. IV. Latin.	Chemistry B. *Economics C.* Latin A. Philosophy B. I. Mathematics. *II. Botany.* [*II. Physiology.*] III. Drawing.* IV. Latin.	Chemistry B. [Economics B.] [English E.] *English F.* I. Mathematics. III. Drawing. IV. Drawing.
12:15	Chemistry B.* German A (b). *History C.* II. Greek.	[English H.] *English M.* German A (b). Physics B.* II. Greek. IV. Physics.	Chemistry B.* [English E.] *English F.* German A (b). II. Greek. III. Greek.	[English H.] *English M.* II. Greek. IV. Mathematics.	Chemistry B.* German A (b). *History C.* [English G.] II. Greek.	Chemistry B.* III. Drawing.* IV. Drawing.*
2:30	*Biology C.* History B. Mathematics B. [English N.] *English O.* I. English. III. Chemistry. III. Greek. IV. Physics.	[Astronomy A.] Biology A. Greek A. *History B.* [English N.] *English O.* I. English. II. Mathematics. III. Chemistry. III. Greek. IV. Physics.		[Astronomy A.] Biology A. Greek A. [English N.] *English O.* I. English. II. Mathematics. III. Chemistry. III. Greek. IV. Physics.	[Astronomy A.] Biology A. [English H.] *English M.* Greek A. I. English. II. Mathematics. III. Chemistry. III. Greek.	
3:20	II. English. III. Chemistry.* IV. Physics.*	Biology A.* [French C.] [German C.] II. English. III. Chemistry* IV. Physics.*		Biology A.* [French C.] [German C.] II. English. III. Chemistry.* IV. Physics.*	Biology A.* Physics A. III. Chemistry.*	
4:10	Bible. French A (b) Latin B.	*Biology C.* French A (b). Latin B.		*Biology C.* French A (b). Latin B.	French A (b).	

[Bracketed titles] are for the first half-year only. *Italicised titles* are for the second half-year only. The hours of gymnasium exercise, as well as those of elective studies not already scheduled, are inserted in the schedule at the opening of the year. *Continued from the preceding period. (a) and (b) are first and second division respectively.

THE CUTLER ACADEMY.

This fitting school, named in honor of one of the most generous and steadfast friends of Colorado College (Henry Cutler, of Massachusetts), provides a thorough preparation for any college in the United States. While the preparatory training is the principal aim, the plan of study is so arranged as to meet the requirements of students who do not propose entering upon college work. The course embraces four years, and the teaching is conducted by instructors most of whom are also engaged in the work of the College.

A student who is preparing in Cutler Academy for some other college than Colorado College, where the requirements for admission differ in some particulars, can by timely application to the instructors, secure such modification of his course as will meet the necessities of his case.

Students of Cutler Academy enjoy the privileges of the Coburn Library, the Department of Fine Arts and the Conservatory of Music, on the same terms as students of the College.

Two excellent literary societies are maintained, one by the girls of the Academy, the other by the boys.

Correspondence concerning the Cutler Academy should be addressed to the Principal, NATHAN B. COY.

THE CUTLER ACADEMY—FACULTY.

WILLIAM FREDERICK SLOCUM
President.

NATHAN B. COY, Principal
Latin and Greek.

LOUIS A. E. AHLERS
French and German.

ERNEST BREHAUT
Latin.

CHARLES BROOKOVER
Physiology and Botany.

FLORIAN CAJORI
Mathematics.

ANNA PEARL COOPER
English and History.

M. CLEMENT GILE
Greek.

EDNA JACQUES
Latin.

FRANK H. LOUD
Mathematics.

HANNAH TAYLOR MUIR
Medical Adviser.

ATHERTON NOYES
English and Greek

EDWARD S. PARSONS
English

ROWLAND H. RITCHIE
Oratory.

JOHN C. SHEDD
Physics.

HUGH A. SMITH
French and German.

WILLIAM STRIEBY
Chemistry.

JOHN H. WAID.
Drawing.

REQUIREMENTS FOR ADMISSION.

Candidates for admission to the Cutler Academy are expected to have finished the eighth grammar grade in the public schools, or to have covered the equivalent of the following work:

Arithmetic—Franklin or Wentworth.

English—Reed and Kellogg's Higher Lessons.

History—Montgomery's United States History.

Geography—Any school Geography.

Applicants for admission who have, within six months, been students in the Colorado Springs High School, must present certificates from the High School, showing completion of the work of the grade preparatory to the Academy class which they wish to enter. The High School will, upon payment of a small fee, provide special examinations for this purpose, if the regular examinations were not passed. The Academy will not examine such applicants, except upon subjects which were not included in their High School course.

Candidates for admission in 1901 are expected to present themselves at Palmer Hall on Tuesday, June 4th, or Tuesday, September 17th, at 9 A. M. Every applicant for admission must bring a satisfactory certificate of good moral character, together with a full written statement of studies pursued elsewhere. Any student whose influence is felt to be injurious to good scholarship or good morals will not be permitted to remain in the Academy.

COURSES OF INSTRUCTION.

CLASSICAL COURSE.

FIRST YEAR.

[The figures denote the number of recitations a week.]

FIRST HALF:	*Latin:* Comstock's First Latin Book; Roman History	6
	Algebra: Through Fractions	6
	English: Review of Grammar (Carpenter); study of narration, writing of simple narrations	4
	Required Supplementary Readings, see p. 62.	
	Government	2
		18

SECOND HALF	*Latin:* First Latin Book completed; Allen and Greenough's Latin Grammar; A Junior Latin Book (Rolfe and Dennison); reading at sight; Roman History	6
	Algebra: Through Radicals and easy Quadratic Equations	6
	English: Gayley's Classic Myths; study of description; composition work	4
	Required Supplementary Readings, see p. 62.	
	History: English	2
		18

SECOND YEAR.

FIRST HALF	*Latin:* Allen and Greenough's Latin Grammar; A Junior Latin Book; Moulton and Collar's prose composition; reading at sight	4
	Greek: Goodwin's Grammar; White's Beginner's Greek Book; Coy's First Greek Reader	5
	English: Genung's Outlines of Rhetoric; choice of words, phraseology, the sentence; constant writing; lyric poetry; figurative language; versification	3
	Required Supplementary Readings, see p. 62.	
	Geometry	3
	German	4
		19

Second Half

Latin: Grammar; A Junior Latin Book; Ovid, Stories from the Metamorphoses; reading at sight; prose composition 4

Greek: Grammar; Coy's First Greek Reader; Xenophon's Anabasis; reading at sight; Greek History 5

English: Genung concluded; the sentence continued; the paragraph; the whole composition; writing by means of outlines; methods of transition; poetry 3

Required Supplementary Readings, see p. 62.

Geometry 3

German 4

19

THIRD YEAR.

First Half

Latin: Grammar; Vergil, Æneid, Books I-III; reading at sight; prose composition (Moulton and Collar, Part II.) 5

Greek: Xenophon's Anabasis (Goodwin), 2 books; reading at sight; written translations; composition (Jones') 5

Algebra† and Plane Geometry 4

English:* George Eliot's Silas Marner; Scott's Ivanhoe; Goldsmith's Vicar of Wakefield; Shakespeare's Merchant of Venice and Julius Cæsar 3

Required Supplementary Readings, see p. 62.

17

Second Half

Latin: Grammar; Vergil, Æneid, Books IV-VI, The Bucolics; reading at sight; prose composition, (Moulton and Collar, Part II) 5

Greek: Xenophon's Anabasis, 2 books, or an equivalent; reading at sight; composition .. 5

Solid Geometry† 4

English:* Shakespeare's *Macbeth;* Coleridge's Ancient Mariner; Addison's Sir Roger de Coverly Papers; Tennyson's Princess 3

Required Supplementary Readings, see p. 62.

17

FOURTH YEAR.

First Half

Latin: Grammar; Cicero, Four Orations Against Catiline; reading at sight; prose composition, (Moulton and Collar) 5

Greek: Homer, Iliad, Books I-III; composition (Jones'); reading at sight 5

Mathematics: Review and general exercises 3

English: Chaucer's Prologue; Spenser's Faerie Queen, Book I; Milton's *L'Allegro*, *Il Penseroso*, *Comus*, and *Lycidas*; Macaulay's *Essays on Milton and Addison* 2

Required Supplementary Readings, see p. 62.

German, *French*, *Physics*, *Chemistry*, *or Freshman Mathematics* 4

19

NOTE:—In the *English* titles above, italics indicate the works intended for careful study; others are for reading.

*An extra period for grammar review will be required of students who show an insufficient knowledge of the subject.

†In 1901-02 Plane Geometry will be taught through the whole year.

SECOND HALF	*Latin:* Grammar; Cicero, Orations for Archias, for Marcellus, and for the Manilian Law; reading at sight; prose composition	5
	Greek: Homer, Iliad, Books IV-VI, and Odyssey, Books I-III; written translations; composition	5
	Mathematics: Review and general exercises	3
	English: Tennyson's *Princess*; Lowell's Vision of Sir Launfal; Burke's *Oration on Conciliation*	2
	Required Supplementary Readings, see p. 62.	
	German, French, Physics, Chemistry, or Freshman Mathematics (continued)	4
		19

SCIENTIFIC COURSE.

FIRST YEAR.

[The figures denote the number of recitations a week.]

FIRST HALF	*Latin:* As in Classical Course, or *German* 4 and *Free Hand Drawing* (4) 2	6
	Algebra: As in Classical Course	6
	English: As in Classical Course	4
	Government	2
		18
SECOND HALF	*Latin:* First half-year continued, or *German and Drawing*	6
	Algebra	6
	English: As in Classical Course	4
	History: English	2
		18

SECOND YEAR

FIRST HALF	*Latin*:* As in Classical Course; *French:* Alternative with Latin	4
	Physiology: Martin's Human Body	4
	German†	1
	English: As in Classical Course	3
	Geometry	3
	General History	3
		17 or 18

*Latin, if elected, must be taken at least two years.
†For those who elected German in first year.

SECOND HALF	*Latin* or *French*	4
	German: As in first half-year	1
	English: As in Classical Course	3
	Geometry	3
	History: As in first half-year	3
	Botany	4
	Drawing (2)	1
		18 or 19

THIRD YEAR.

FIRST HALF	*Latin*: As in Classical Course, or *French*‖ 1 and *German* 4	5
	Chemistry: Williams' Elements of Chemistry; laboratory practice	4
	Algebra and Plane Geometry, as in Classical Course	4
	English‡: As in Classical Course	3
	Free Hand or *Mechanical Drawing*	2
		18
SECOND HALF	*Latin* or *German* and *French*‖: First half-year continued	5
	Chemistry: First half-year continued	4
	Solid Geometry: As in Classical Course	4
	English‡: As in Classical Course	3
	Drawing: First half-year continued	2
		18

FOURTH YEAR.

FIRST HALF	*Latin* or *French*, 4, (or *German*) and *Mechanical* or *Free Hand Drawing* (2) 1	5
	Physics: Text-book and laboratory practice	4
	Review Mathematics: As in Classical Course	3
	Algebra and *Plane Trigonometry*, (Freshman Mathematics)	4
	or *Chemistry B*, (see p. 43.)	4
	English: As in Classical Course	2
		18
SECOND HALF	*Latin*, or *French* (or *German*) and *Drawing:* First half-year's work continued	5
	Physics: First half-year continued	4
	Review Mathematics: As in Classical Course	3
	Mathematics: Plane Trigonometry; Solid Geometry	4
	or *Chemistry B*, first half-year continued	4
	English: As in Classical Course	2
		18

‡An extra period for grammar review will be required of students who show an insufficient knowledge of the subject.

‖For those who elected French in second year.

HONORS.

Scholarship Honors of two grades are awarded at Commencement for excellence in the work of the year. The Honor list for 1899-1900 was as follows:

HIGH HONORS.

AARON JOSEPH LYMAN, '00.

HONORS.

LILLIAN GARLAND CHAPMAN, '00.

SARAH FOSS WOLVERTON. '00.

MARJORIE TRUE GREGG, '01.

GEORGE ROBERT DRYSDALE, '02.

ELIZABETH JEANNETTE LOCKHART, '02.

FLORENCE KELLOGG ROOT, '02.

FRANK HENRY SCHAPPER, '02.

JACOB DAVID CURTIS, '03.

APPENDIX.

REQUIRED SUPPLEMENTARY READINGS IN ENGLISH.

First Academy: Macaulay's Lays of Ancient Rome; Hawthorne's Wonder Book and Tanglewood Tales; Æsop's Fables; Gulliver's Travels; Arabian Nights; Scott's Ivanhoe; Dickens' Oliver Twist; Hughes' Tom Brown at Rugby; Kipling's Jungle Books; Kingsley's Water Babies; Tennyson's Enoch Arden; Lamb's Tales from Shakespeare.

Second Academy: St. Pierre's Paul and Virginia; Lanier's The Boy's King Arthur; Longfellow's Tales of a Wayside Inn; Irving's Tales of a Traveler; Dickens' Christmas Carol; Lanier's The Boy's Froissart; Bryant's Iliad; Scott's Talisman; Kingsley's Westward Ho; Hawthorne's Twice Told Tales; Brown's Rab and His Friends.

Third Academy: Scott's Marmion and the Lady of the Lake; Shakespeare's Twelfth Night and Richard II; Irving's Conquest of Granada; Scott's Quentin Durward and Peveril of the Peak; Bulwer's The Last Days of Pompeii; Plutarch's Lives of Themistocles and Alcibiades; Fiske's War of Independence; Thackeray's Newcomes.

Fourth Academy: Palmer's Odyssey (or Leaf's Iliad); Matthew Arnold's Sohrab and Rustum; Scott's Guy Mannering and The Heart of Midlothian; Blackmore's Lorna Doone; Curtis' Prue and I; Saintine's Picciola; Jane Austen's Pride and Prejudice; Fiske's Critical Period of American History.

CONSERVATORY OF MUSIC.

FACULTY.

RUBIN GOLDMARK,

Director of the Conservatory of Music and Professor of Harmony, Counterpoint and Composition.

CLARENCE W. BOWERS,

Instructor in Piano-forte and Organ.

GEORGE CRAMPTON,

Instructor in Voice Culture and Sight Reading.

OMA FIELDS,

Instructor in Piano-forte.

MAMIE HERMAN,

Instructor in Violin.

The conservatory of Music was established in 1894, and offers a thorough education in all the higher musical branches. On account of the exceptional facilities afforded by the Perkins Fine Arts Hall, lately erected, this department has been especially prosperous. Instruction is now given to nearly 100 students.

The Conservatory is modeled after the best European and Eastern Institutions. Its chief function is, while enabling the student to acquire technical proficiency in any desired branch of the art, to mould him into a musician. This can be accomplished only by a conservatory where the students of the various depart-

ments are drawn closely together in the exercise of their art. Co-ordinate branches are opened to view, a musical atmosphere is created, the horizen is widened, and the student unconsciously absorbs much that is of inestimable value.

The study of Musical Theory is of the utmost importance to every musician. The more he knows of Harmony, Counterpoint, Composition and the general History of Music, the more will his musical culture be increased, his artistic view be broadened, his appreciation of the classic works of the great masters be deepened, and the more will he be able to impart to others the fundamental principles whereon musical progress is based. The Conservatory also provides for a course of illustrated lectures on general musical subjects and a series of recitals and concerts, furnishing the student an opportunity of viewing in practice what he has learned in theory.

Since languages, æsthetics and belles lettres are of importance to the serious musician, it is especially fortunate that the Conservatory stands in such intimate relations to the College, and that the pupils may avail themselves of its varied privileges.

The Conservatory is under the same general supervision as the other departments of Colorado College, and under the immediate management of the Director and Faculty of Music. The general rules of the College apply to students of music also.

For those students of the Conservatory who desire to study in the College, the fee for one course is ten dollars a term, or twenty dollars a year. For two or more courses, the regular tuition of seventeen dollars and a half a term, or thirty-five dollars a year is charged.

COURSES OF STUDY.

The following courses of study are offered: Piano, violin, organ, voice culture, harmony, counterpoint and composition. Further instruction will be provided as soon as a sufficient demand is evident.

The student is offered a choice between class and private instruction. Attention is called to the marked advantages that result from the former, where an hour is divided among three pupils and all remain in the class the full time; in this manner they learn as much by listening to their classmates as when receiving instruction themselves. For those who intend to adopt teaching as a vocation, it is most important to profit by the mistakes of others. The system of class instruction is in vogue in all European and in most of our Eastern conservatories.

I. PIANO FORTE.—The instruction is adapted to the individual needs of each pupil.

The course is divided into six grades, *First and Second Elementary*, *First and Second Intermediate*, *First and Second Advanced*.

In the *First Elementary* grade the pupil is taught to read music, to play major and minor scales and simple arpeggios. The works used are Mathew's graded studies, Books I and II and New England Conservatory Method, Parts I and II.

Second Elementary:—Scales and Arpeggios (these are continued in various forms throughout all the grades.) Etudes: Loeschhorn, op. 65, Heller op. 47, Czerny op. 139, and School of Velocity, Books 1 and 2. Bach, Little Preludes and Fugues. Sonatinas: Clementi, Kuhlau Dusseck and easy selected pieces by standard composers.

First Intermediate:—Etudes: Loeschhorn op. 65 and 66, Heller op. 45, 46, 81. Czerny, School of Velocity Books 3 and 4. Six octave studies. Sonatas by Haydn and Mozart, the easier sonatas by Beethoven, Mendelssohn Songs without Words, and selected pieces by Hummel, Moscheles, Jensen Merkel and Rheinberger.

Second Intermediate:—Czerny etudes op. 740 and forty daily studies, Kramer-Bulow 50 etudes, Bach, two and three-part inventions, Arthur Foote op. 21. Loew octave studies, Beethoven sonatas, Schubert Impromptus and Momens Musicaux, Handel Variations and works of moderate difficulty by Mendelssohn, Schumann, Weber, Rubinstein and Rheinberger.

First Advanced:—Clementi, Gradus ad Parnassum; Taussig, daily exercises; Moscheles, op. 70; Kullack, octave studies; Bach, well-tempered Clavichord; Mendelssohn, preludes and studies; selections from the works of Beethoven, Schumann, Chopin, Raff, Rubinstein, Moskowsky, Grieg and MacDowell.

Second Advanced:—Chopin op. 10 and 25, Henselt op. 2 and 5, Rubinstein op. 23, Liszt Paganini Studies and Etudes Transcendentales, Bach-Liszt Fugues and other transcriptions, Concertos by Beethoven, Schumann, Chopin, St. Saens, Grieg, as well as those works which constitute the repertory of the modern pianist.

Attention is devoted throughout the course to sight-reading, accompanying and ensemble playing.

The time necessary to complete each grade will depend on the ability of the pupil and on the number of hours of daily practice.

Upon the completion of each grade a certificate will be issued by the director.

At the close of the *First Advanced* grade the student may receive a Teacher's Certificate.

A diploma will be issued to graduates, who successfully finish vocal or instrumental courses, and are able to pass an examination in sight-reading, harmony, general analysis of musical form and history of music.

II. Voice Culture and Singing.—Especial attention is given to a correct management of the breath, the posing and preservation of the voice, artistic phrasing, and the development of a refined musical taste.

The course is divided into three grades: *Elementary*, *Intermediate*, and *Advanced*.

Elementary:—Breathing Exercises, Simple Tones, Attack, Blending of Registers, Nava's Elements of Vocalisation, Easy Songs.

Intermediate:—Intervals, Major and Minor Arpeggios, Major and Minor scales, Phrasing, Nava, Book II, Concone and Nava Solfeggi, Songs.

Advanced:—Further Development of the Voice, Scales, Embellishments. Special attention will be given to Ear Training in all the grades. German Lieder, Arias from Oratorio and Opera.

III. ORGAN.—It is required of pupils admitted to this course that they shall have first studied the piano for at least one year.

The *Elementary* grade is devoted to exercises in pedal playing, first studies in pedal obligato, hymn-tune playing, and elementary registration.

The *Intermediate* grade embraces an extended study of registration through the medium of pieces especially adapted for use as preludes and postludes in church service, including studies and pieces of the polyphonic type as represented by Bach and Rink, and the practice of quartette and chorus accompaniment.

The *Advanced* grade is devoted to the study of organ solo, including Bach's Preludes and Fugues, works in sonata form by Mendelssohn and others, modern works in free form, and lessons in improvisation and transposition.

IV. HARMONY.—This course includes the study of the various chords, their structure, relations and progressions, the working out of figured basses, the harmonization of choral melodies, and modulation. All the principles are taken down by the students from demonstrations in the class-room. Richter's Harmony is used as a work of reference.

V. COUNTERPOINT.—This subject can be taken only by those who have satisfactorily completed the study of Harmony.

Simple and double counterpoint for two, three and four voices, imitations, canons, three and four part vocal and instrumental fugues. No text-book is used.

Harmony and Counterpoint have been placed on the list of elective studies in the regular College courses.

VI. COMPOSITION.—This subject is divided into two courses of one year each. A thorough knowledge of Harmony and Counterpoint is necessary for admission.

Part I. The construction of phrases and periods; the simpler instrumental forms; the scherzo, rondo, adagio, variations, and the sonata form. The student does practical work in all these departments of Composition; the work is criticised in detail in the class-room. Especial attention is devoted to the analysis of the classic master works.

Part II. Instrumentation; the nature and characteristics of all the orchestral instruments, and their applica-

tion in symphonic writing; the larger vocal and instrumental forms; the string quartette and various branches of chamber music; continuation of analysis and reading from score.

FREE ADVANTAGES.

Sight-Reading Class:—A class in solfeggio and singing at sight is organized each year, and is free to all students of the Conservatory.

Special Lectures and Concerts:—All lectures and concerts given under the auspices of the Conservatory are free to students of music.

The following have been given this year:

Seven Wagner Lecture Recitals by Mr. Goldmark.

Tristan and Isolde.
Parsifal.
Rheingold.
The Valkyrie.
Siegfried.
Goetterdaemmerung.
The Mastersingers of Nuremburg.

Three Chamber Music Recitals by Miss du Pre of Denver and Mr. Goldmark, assisted by Mrs. J. S. Tucker and Mr. Crampton.

Modern French music—sonatas by Franck and Faure, songs by Gounod, Massenet, etc.

Modern German music—sonatas by Brahms and Bruch, songs by Brahms, Franz, Jensen, etc.

Mr. Goldmark's compositions—sonatas for Piano and Violin, trio for Piano, Violin and Cello, songs for Barytone and Soprano, Twilight Phantasies for Piano.

Three Analytical Organ Recitals by Mr. Bowers.

The French School—Symphony by Widor, selections from Guilmant, Dubois, Chauvet, etc.

The German School—Bach's Triple Fugue in E Flat, selections from Mendelssohn, Handel, Wagner, Schumann, etc.

The American School—compositions of Paine, Chadwick, Dunham and others.

A Song Recital by Mr. Crampton, assisted by Mr. Soutter and the College Glee Club. Songs by Coleridge-Taylor, Villiers-Stanford, McDowell, Brahms, etc.

Ensemble Class:—A class in eight-handed playing on two pianos is conducted by Mr. Bowers.

History of Music:—Lectures on the History and Theory of Music will be given before the conservatory next year.

Pupils' Recitals:—A number of recitals are given during the year by the pupils, to which only the students of the Conservatory are admitted.

The Colorado Springs Musical Club, which holds bi-weekly meetings during the year, has made a special low membership rate to students of the Conservatory.

Artists' Concerts:—The Colorado Springs Musical Club also gives an annual course of concerts by famous artists, for which they have offered a materially reduced rate to students of the music department. Among the artists who have appeared this year are Lillian Blauvelt, Godowsky, Mr. and Mrs. Henschel. Arrangements have been made to secure the Kneisel Quartette in May.

Great artists are continually stopping over at Colorado Springs to give concerts. This is a feature of the greatest possible value to all students of music.

SPECIAL ADVANTAGES.

In the Perkins Fine Arts Hall are ten practice rooms for the use of students of the Conservatory residing on the campus. A nominal fee is charged for the rent of the pianos.

The healthful surroundings and unexcelled climate of Colorado Springs are especial advantages to the music student. In many cases the study of music is a severe tax on the strength of the conscientious pupil. Here he can pursue musical and other studies, while at the same time gaining health and strength.

The student has access to the courses in Physical Training in the College, free of cost.

The College Library is open to students of music on the same terms as to students of all other departments—three dollars a year.

EXPENSES—TUITION.

By the term of four months (coinciding with the College half-year), payable in advance; two lessons a week.

CLASS LESSONS, ONE HOUR LONG.

Piano-forte, violin, voice, each	$25 00
Harmony	12 00
Counterpoint	18 00
Composition	22 50

PRIVATE HALF-HOUR LESSONS.

Piano-forte, violin, voice, organ, each	$35 00

ROOMS AND BOARD.

Montgomery, Ticknor, South and Hagerman Halls, the homes of College and Academy students, will be open to students of music at the same rates as to others. See page 92.

OTHER EXPENSES.

Library Fee (if Library is used), by the year	$3 00
Rent of Piano, one hour each day, by the term	3 00
Rent of Piano, two hours each day, by the term	5 00
Rent of Piano, each additional hour, by the term	2 00
Rent of two-manual organ, 1 hour each day, by the term	10 00

Students will be accepted only on payment of a full term's tuition. No deduction will be made for absence from lessons, except on account of prolonged illness.

DEPARTMENT OF ART AND DESIGN.

LOUIS J. SOUTTER,

Director and Instructor in Drawing and Painting.

J. L. WAID,

Instructor in Commercial Art, Mechanical Drawing and Designing.

Drawing and Painting.—Instruction is given in pencil and charcoal drawing from the cast and life, perspective, artistic anatomy, decorative designing and modeling, illustrating, commercial art, mechanical drawing, the history of art, and painting from life and still life in oil, water color and pastel. Emphasis is placed upon thoroughness and maintenance of artistic ideals, and students are encouraged to strike out along original lines. Those without previous training devote most of their time to drawing in pencil and charcoal from the cast and still life, but from the first some work is done with colors. Advanced students draw and paint from life in charcoal, oil, water color and pastel. Every week a subject to be illustrated by an original composition is given and the pupil executes it in any medium he desires. Students model in composite clay, first from objects, afterwards from the cast and life. An important feature is the sketch class, conducted exclusively by the students.

Commercial Art, Mechanical Drawing and Designing. A course in commercial art has been established, designed to prepare thoroughly for responsible positions in engraving houses and on newspapers and magazines. Courses are given in pen drawing, gouache, historic ornament, original designing, and engraving processes, particularly those used in newspaper and magazine work. The students are taught how various effects are obtained and how to estimate the cost of plates and printing.

The opening of the Perkins Fine Arts Hall last year marked a most important advance. It contains the exhibition rooms and

studios of the art department. The studios are open from 9:30 a. m. to 5 p. m. Many paintings have recently been added to the already fine collection in the exhibition hall. Several important special exhibitions of students' work have been held during the past year. The drawings receiving honorable mention on these occasions are retained for the annual exhibition.

All materials except easels and drawing boards are furnished by the students. Lockers are provided by the school.

SCHEDULE.

	9:30 A. M.	2:00 P. M.
Monday	Studies of Expression: Head Life.	History of Art. Commercial Art: Drawing for Illustration.
Tuesday	Studies of Expression: Head Life.	Artistic Anatomy. Commercial Art: Drawing for Illustration.
Wednesday	Still Life.	Children'sClass—2:30-4:00. Perspective (first half year.) Lettering (second half year.)
Thursday	Character Sketching: Costumed Model. (Time Sketching once a month.)	Historic Ornament and Designing.
Friday	The Cast. Mechanical Drawing.	Modeling. Historic Ornament and Designing.
Saturday	The Cast. Children's Class. Mechanical Drawing.	

TUITION.

One year, five days a week in studio	$100 00
One-half year, five days a week in studio	60 00
One year, two days a week in studio	50 00
One-half year, two days a week	30 00
Single lessons (in class)	1 50
Single lessons (private)	2 00

CIRCULAR OF INFORMATION.

LOCATION.

Colorado College is fortunate in its environment. The city of Colorado Springs, the county seat of El Paso County, and the third largest municipality of the commonwealth, is somewhat remarkable for its history and character, and is admirably adapted to be the seat of a college. Founded in 1871, under the direction of men of shrewd foresight and broad views, it has maintained from the beginning high standards of morality and culture. Saloons and the attendant destructive influences are absent. Radiating railroad systems and the recent development of neighboring gold fields, have fostered its wealth. While for its first inhabitants it was indebted largely to Pennsylvania and the more northern Atlantic States, as well as to England, its present population of more than twenty thousand is drawn from all sections of the country, and to some extent from foreign lands. Numerous visitors are attracted hither yearly, both pleasure-seekers and health-seekers, but the invalids are so far outnumbered that the place has none of the depressing influence so often observed at noted health resorts. It is fully supplied with the conveniences of city life, yet the lover of nature might seek far before finding a spot more favored. The mountains are close at hand and their serrated line occupies about one-third of the horizon. In the center of the range, and at an air distance of less than a dozen miles, stands the renowned Pike's Peak. Its summit is reached by a cog-railway, as well as by bridle-paths and by an excellent carriage road. About its base are numerous canons, and in one of these, around a celebrated group of mineral springs, has grown up the city of Manitou. The climate of Colo-

rado Springs has attained a world-wide reputation. Its curative qualities consist largely in the opportunity for outdoor exercise afforded by the great number of fine days and in the dryness and rarity of the air, which add a quality exhilarating to all and regarded as a specific in cases of malarial diseases, asthma, and incipient phthisis. Students unable to work in other climates may here continue their studies, while at the same time making a permanent gain in health. This plan has been successfully carried out in numerous instances.

COLLEGE BUILDINGS.

The buildings of the College are situated on a tract of land, including about fifty acres, which, by reason of the growth of the city, has come to have nearly a central location. The most important are the following:

PALMER HALL, the oldest building on the campus, was first occupied in 1880. It contains, in addition to lecture-rooms, the Chemical, Physical and Biological Laboratories, and the Museum, a description of which may be found on page 81.

THE LIBRARY, given in 1894 by the late Mr. N. P. Coburn, of Newton, Mass., and erected at a cost of $50,000, is an edifice of great architectural beauty, and admirably adapted to its purpose. It is of the "Peach Blow" sandstone of Colorado, and its roof is of red tile with copper mountings. The interior, with its ceiling twenty-six feet high, its red oak woodwork, its picturesque galleries, its inviting alcoves, its great stone fireplaces, is exceedingly attractive. Long arched windows extend from floor to ceiling. A full-sized cast of the "Winged Victory" of Samothrace stands at one end of the main hall. It was given in 1894 in memory

of the Rev. Daniel P. Noyes and Helen McGregor Noyes, his wife, by their three children, Miss M. McGregor Noyes, Prof. Atherton Noyes and Mr. Edward P. Noyes. In one of the recesses is a fine marble bust of Antinous, presented by Mrs. H. L. Ballou, and in another one of Dante, given by Mrs. Philip Washburn. There is also a cast of the Hermes of Praxiteles, presented by the class of '99. A large case, containing Mr. A. L. Dickerman's collection of rare and valuable Indian curiosities, adds to the interest of the room. The well-lighted basement is used as a reading room.

The President's Residence, at the northern boundary of the campus, is a commodious building, purchased by the Trustees in 1888.

The Astronomical Observatory is the gift of Henry R. Wolcott, Esq., of Denver, and was completed in June, 1894. On the lower floor is a well-appointed lecture-room, with an adjoining study, a transit-room and a photographic dark room. Upstairs is the dome-room, containing the equatorial telescope, supported on a stone pier.

The Gymnasium, built by the students of the College in 1891, contains an excellent assortment of apparatus. See "Physical Training," p. 49.

The Perkins Fine Arts Hall, named for one of the principal donors, the late Willard B. Perkins, of Colorado Springs, is the latest addition to the equipment of the College. It is a two-story stone building, erected at a cost of $30,000. The lower story is a large auditorium, with ceiling twenty-three feet high, capable of seating 600 persons. In it the chapel exercises are held and concerts and lectures are given. This room contains a valuable pipe organ, given by Miss Elizabeth Cheney, of Wellesley, Mass., in memory of her brother, Mr. Charles P. Cheney, who died in

Colorado Springs in 1897. In the hallway stands a bronze statue of Hermes, presented by Mr. James F. Burns. The upper story contains the studios, practice and lecture rooms of the Department of Fine Arts and the Conservatory of Music. In the exhibition room are hung collections of paintings loaned to the College by Mr. J. J. Hagerman and Mr. Verner Z. Reed. During the exhibition of paintings by local artists, held when this building was dedicated, Mr. Louis R. Ehrich purchased Mr. Leslie J. Skelton's painting, "Meadow-Land, Montigny, France," and presented it to the College as the nucleus of a permanent collection. To this has been added a picture by the well-known French painter Iwill, through the instrumentality of Mr. Leslie J. Skelton, and two paintings by Mr. Harvey Young, "Crystal Lake," California, the gift of Mr. Verner Z. Reed, and "La Sal Mountains," the gift of General William J. Palmer, Mr. James F. Burns and Mr. John G. Shields. Mr. Burns has lately presented a valuable collection of Japanese prints.

COLLEGE RESIDENCES.

HAGERMAN HALL is a substantial stone building, built in 1889, and used as a residence for young men It is under the supervision of Miss Ella Worden. Besides the students' rooms, which are well lighted and attractive, it contains a dining-room which can accommodate one hundred and fifty persons, as well as the Y. M. C. A. reading-room. In the upper story is the Weather Bureau office. (See p. 80.) The dining-room is now used by a young men's boarding club.

MONTGOMERY HALL was erected and furnished in 1891 by the Woman's Educational Society, and presented free of debt to the College. It provides a comfortable and attractive home for the young women of

the Academy, and is equipped with all modern appliances for their convenience. The dining-room is now used by a young women's boarding club.

TICKNOR HALL, the generous and beautiful gift of a friend of the College, was opened as a home for the young women of the College in January, 1898. Its comfort and conveniences are the result of careful study of the most perfect of recently-built dormitories for women. Besides students' rooms, it contains the College dining-room, drawing-rooms and guest-rooms, an infirmary capable of complete isolation, and a large study-room, comfortably furnished and provided with reference books, for the use of all the young women of the College and Academy.

SOUTH HALL, a commodious and convenient building finished in December, 1900, adjoins the campus and is leased by the College as a third residence for young women.

Members of the Faculty are resident in each of the halls.

After all vacancies in the halls are filled, young women can secure rooms in the vicinity subject to the approval of the Dean of Women. No young woman will be received into the halls who is less than sixteen years of age and who is not taking at least fifteen hours work or the equivalent of that amount.

All of the foregoing buildings, except the Gymnasium, are of stone. Heat and electric light are furnished to all from a central plant upon the College grounds.

SCIENCE AND ADMINISTRATION BUILDING.

During the coming year there will be erected another building, which will be the largest and finest yet constructed. The purpose of the Trustees is to expend not less than $100,000 upon the construction of

the building and $25,000 upon its equipment. The sum of $50,000 has already been contributed for its endowment and $100,000 is already in hand for building purposes. The offices of the President and the Treasurer of the College will be located in it, and it will also contain fully equipped lecture rooms and laboratories for scientific work in all departments. It is the aim of the Trustees to make this building contribute to the scientific development of the locality and of the State.

LIBRARY.

The beautiful building in which the Library of the College is housed, has been elsewhere described (p 74.)

The number of volumes on the Library shelves amounts to twenty-five thousand, with nearly as many pamphlets in addition. The leading literary and scientific journals are regularly received, as are also the United States Government publications and those of the State of Colorado. Of United States documents the library now has a well arranged collection of about four thousand volumes, including the records of Congress complete from 1847 to date, and many valuable records for the period 1774—1837. These documents are arranged on the plan adopted in the library of the Superintendent of United States Documents at Washington, thus making available all the cataloguing required by law to be done there.

The Medical Alcove was originated in 1894 by the generosity of the late Dr. B. F. D. Adams, of Colorado Springs, who presented to the College his extensive medical library. The El Paso Medical Society maintains the efficiency of this department by contributing the transactions of Medical Societies and standard works purchased out of the funds of the Society for the use of its members. In July, 1896, moreover, the

collection of works on medicine was much enriched by the gift of two hundred and fifty volumes and three hundred pamphlets from the late Dr. E. C. Kimball, of Colorado Springs.

With the commencement of the year 1896, a new departure in the Library management was inaugurated. The control of the Library was vested in a board of twenty-five, composed of members of the Faculty and Board of Trustees and of persons not otherwise connected with the College. Simultaneously with the creation of this board, the Library was opened as a circulating library to residents of the city. It was thought that the educational advantages afforded by access to the best books in literature, history and science might be extended to all citizens of Colorado Springs without detriment to the interests of the students and teachers of the College. Access to the shelves is permitted, and all the privileges of the Library, including the use of all the current magazines and periodicals taken by the College, are open to the public on payment of the small fee required of College students. The Library is open from 8:30 a. m. to 6 p. m.

The "Coburn Library Book Club," organized in November, 1897, has met with remarkable success. The objects of this club are to provide its members with the best new books published, and to give these books to the Library at the end of twelve months. Its membership fee is $5 a year or $2 for three months, and includes the full privileges of the Coburn Library. It has a membership of one hundred, and has purchased about one thousand books, of which nearly seven hundred have been given to the general library.

In addition to the books acquired through the Club, many books bearing directly on the work of the College are added by purchase, and books of a general nature

are contributed frequently by friends of the College. During the past year Mr. James F. Burns has presented a very valuable set of books on Japanese Art, and Mrs. Edsall has given a number of books on genealogy. There is also a collection of genealogical works loaned by the local chapter of the Daughters of the American Revolution.

READING ROOMS.

In the basement of the Library building is a reading room for the use of students and friends of the College, where the current literary and scientific magazines, as well as a number of leading newspapers, may be consulted. The young men have the benefit of a similar room in Hagerman Hall, under the control of the Young Men's Christian Association of the College, while for the young women a study and reading-room is provided at Ticknor Hall.

LABORATORIES AND APPARATUS.

In addition to the physical, chemical and biological laboratories, a mineralogical laboratory has been recently established. The equipment includes eight working collections and six mineralogical tables, supplied with all the necessary apparatus. A complete series of crystallographic models of the best European manufacture has also been provided.

The Observatory has a telescope of four inches aperture, presented by Mr. Henry R. Wolcott of Denver, a transit-instrument and a sidereal clock, both given by Mr. Charles S. Blackman of Montreal, Canada.

A Meteorological Observing Station is maintained by the College and daily records are made and reported to the United States Weather Bureau. A Monthly report is also made to the Health Department of Colo-

rado Springs. The instruments now in the station are dry and wet bulb thermometers, a maximum and a minimum thermometer, a Richards thermograph, a mercurial barometer, a self-registering anemometer, an anemoscope, a rain and snow gauge, and a Draper barograph.

MUSEUM.

An excellent foundation for a Museum was early laid by the gifts of Prof. J. H. Kerr, Rev. E. N. Bartlett, Dr. E. P. Tenney and Mr. George Fowler, and by the purchase of mineral and botanical collections from the Rev. R. T. Cross and Prof. Marcus E. Jones respectively. The gifts in geology and zoology by Professor Kerr, donor of some two thousand specimens, were destined to be of special value, the former including as their central feature the Ward "College Collection" of over 600 representative minerals and rocks.

By far the largest and most important contributions to the Museum are the W. S. Stratton donation and the collection given by General William J. Palmer and the Colorado Springs Company.

During the past year through the generosity of Mr. Stratton, the large natural history collections formerly at Coronado Beach have been secured at a cost of $33-000 and are now stored, awaiting the erection of the Science Building. They include a large mounted collection of mammals and birds, many exceedingly rare and difficult to procure; a superb and very extensive collection of minerals, common, commercial and rare; and a collection of casts and restorations of fossils, particularly of the more remarkable of the extinct Vertebrata. A few of the more noteworthy specialties are a mounted group of all the known genera of Marsupial Mammals, a group of mounted Orang Outangs (valued at about three thousand dollars, owing

to the diminishing number of these animals); the cast of Megatherium cuvieri, a gigantic ground-sloth, a complete mounted skeleton of one of the largest whales, and a restoration of the Mammoth of the Ice Age, one of the largest and most remarkable single pieces ever exhibited in any museum, after an original made in Europe by Prof. Leo Phillipp Martin, assisted by Mr. G. Stainsky, now of Colorado Springs.

In 1896 General William J. Palmer and the Colorado Springs Company purchased for the College the large paleontological cabinet of Professor Cragin, consisting of some eight thousand specimens from Colorado, Kansas, Indian Territory, Texas and other States. The collection contains some mineral and zoological specimens, but is chiefly valuable for its paleontological material, which includes remains of Pliocene horses and llamas, Miocene rhinoceroses and mastodons, Cretaceous saurians, Tertiary fishes, and a large series of shells, echinoderms, and other invertebrates from the lower Cretaceous. It is of importance, not only as supplying a large part of the geological record not otherwise represented in the Museum, but also as being the elaborated result of years of research and containing the types of many new species and some new genera of fossils, both invertebrate and vertebrate. Among these type-fossils, the most important is the large plesiosaurian reptile, *Trinacromerum*, the type of a new genus and species described from the Cretaceous of Kansas in 1888.

Valuable recent contributions to the Museum are the collection of fossil invertebrates, chiefly Tertiary Mollusca from the Atlantic slope, presented by Professor William B. Clark, of Johns Hopkins, State Geologist of Maryland, and the Educational Series of rocks received from Mr. Charles D. Walcott, Director of the

United States Geological Survey. The latter is a systematic collection of unaltered and metamorphic rocks, including those of mechanical, chemical, organic and igneous origin, together with a few specimens illustrating special geological processes. It includes 156 numbers, prepared and catalogued by Mr. Joseph S. Diller of the Survey.

In addition to those already mentioned, the Museum equipment in geology includes collections of rocks from the Cripple Creek mining district, presented by Prof. George H. Stone, and from New Hampshire (the N. H. Geological Survey series), one of minerals from Lake Superior, the Rufus M. Bagg collection of Foraminifera, and many miscellaneous specimens.

During the past year the Museum has received, in addition to the W. S. Stratton gift, numerous smaller donations. A few of the more interesting are a collection of shells, minerals, etc., presented by Mrs. Francis W. Goddard, in the name of her son, the late Mr. Henry Ledyard Goddard; a collection of 27 named species of Carboniferous fossils from Glen Eyrie, by Mr. Robert T. Walker; one of some 40 species of Carboniferous fossils from the Chiricahua mountains of Arizona, by Prof. G. H. Stone; a collection of miscellaneous specimens, in part fossils from Persia, by Prof. J. C. Shedd; a very large and fine geode of millerite, the curious hair-like mineral known also as "capillary pyrites," on calcite, by Mr. E. B. Beeson and Dr. J. M. Shafer; and a 50-pound sample of high grade copper ore (bornite with chalcocite and chalcopyrite) from the Silver Bar mine, by Messrs. C. H. White and D. P. Sill.

In Zoology, the Museum has useful collections in sponges, corals, echinoderms, mollusks and birds, with

small herpetological and osteological collections, and some material in other groups.

RELIGIOUS LIFE.

As was stated in the introduction to the Bulletin, it has been the aim of the College authorities, from the outset, to build up in Colorado Springs a distinctively Christian College; one which, while maintaining the best standards of intellectual work, will recognize Christian character as the highest possible attainment and the religious spirit as the most potent inspirer of mind and soul alike. This result has been sought in no sectarian spirit. No student is influenced in any way toward any particular denomination. When students come to the College, inquiry is made as to their denominational affiliations, and what churches in the city they desire to attend; lists are sent to the pastors of these churches with the request that they seek the students out and bring about them the influence of the church home. The students are received into the city churches, and in a very short time are found taking active part in their religious work.

Various services at the College express the religious spirit. Sunday evenings a vesper service, chiefly of music and prayer, with a brief address, is held in the study room of Ticknor Hall.

Six days in the week, at 9:15 in the morning, all the students gather with the Faculty, and such friends from outside as may wish to attend, in the chapel for morning prayers. Occasionally the service is shortened for the President's ethical talk, in which he discusses questions bearing on the student life, taking up such subjects as truthfulness, courtesy, large-mindedness,

pure-mindedness, reverence. These talks have had a marked influence upon the standards and tone of the College life.

Once a year the students and Faculty unite in the exercises of the Day of Prayer for Colleges. A prayer meeting is held at an early morning hour; then follows, at 11 o'clock, the public service in the chapel, with an address by some speaker from outside the College. During the day, classes often hold meetings by themselves, and in the evening all unite again in a prayer and conference meeting. A deep earnestness always pervades the exercises of the day.

There are religious organizations under the control of the students themselves. The Young Women's Christian Association holds a Sunday afternoon meeting. The second meeting of each month is a union missionary meeting with the Young Men's Christian Association. Several classes for the study of the Bible have held regular sessions during the year. Many of the young women are working under the direction of the Society in mission and sewing schools and other charitable organizations. Clothes and food have been provided by them for a number of poor families. A specific work undertaken by the society is the support of a missionary in China. Two young women were sent last summer to Lake Geneva, Wis., to the Y. W. C. A. conferences.

The Young Men's Christian Association holds a Sunday afternoon meeting and evening prayers in Hagerman Hall. It has organized several classes for Bible study and one for the systematic study of missions. Besides this work and that done in the churches of the

town, the young men support a native worker in India. Four delegates were sent last summer to Lake Geneva, Wisconsin.

At the beginning of the college year, members of the Associations meet all trains and welcome new students.

The Student Volunteer movement is represented by an earnest band of young men and women. Its members, who have declared it as their purpose to go to the foreign field if God opens the way, endeavor by every means to bring before the students and the various young people's societies in the city and its vicinity the importance of missionary work. Of the ten former members of the band, seven are continuing in other institutions their preparation for the foreign field, and three are already actively engaged in missionary work.

ALUMNI ASSOCIATION.

The Alumni Association of Colorado College is becoming one of the most important features of the College. Its membership consists of those students who have attended the College long enough to have an interest in its welfare, and who desire to keep up the acquaintance of graduates and former students. The annual meeting and banquet of the Association occurs during commencement week.

OFFICERS.

CHARLES R. ARNOLD, '89, - -	President.
G. K. OLMSTED, '94, - - -	1st Vice President.
E. D. HERON, '93, - - -	2d Vice President.
EDNA JACQUES, '00, - - -	3d Vice President.
FRED S. CALDWELL, '00, - -	4th Vice President.
JAMES E. CHAPMAN, 00, - -	5th Vice President.
HARMONY A. WOODWORTH, '96, -	Secretary.
FREDERIC R. HASTINGS, '91, -	Treasurer.

STUDENT PUBLICATIONS.

The *Tiger*, a weekly newspaper, is issued by an editorial board composed of College students. An *Annual* is published in May by the Junior class. A *Handbook* of information is issued at the beginning of the College year by the Y. M. C. A.

LITERARY SOCIETIES.

The Oratorical and Debating Society has charge of oratorical and debating contests. All students of the College are members of the society, and may compete in the oratorical contest or for a place on the intercollegiate debating team. M. S. Collin (Special) was awarded second place in the State contest. The team chosen to represent the college in the fourth annual debate with the University of Nebraska this spring consisted of B. Griffith, '01, B. M. Rastall, '01, and C. W. Weiser, '02.

The Apollonian Club and the Pearsons Literary Society, composed of young men, and the Contemporary Club and Minerva Society, consisting of young women, hold weekly meetings for debates and other literary work. Besides these College societies, there are two Academy societies, the Hesperian and the Philo. During the year the Hesperian Society held a debate with the Preparatory School of Denver University.

COLORADO COLLEGE SCIENTIFIC SOCIETY.

The Colorado College Scientific Society holds monthly meetings. The objects of the society are: "The discussion of recent scientific results, the promotion among its members of scientific inquiry and inves-

tigation, and the publication of the more important papers read at the meetings." It was organized in January, 1890, and has already done some excellent work. Eight annual publications, entitled "Colorado College Studies," have been issued, and a considerable number of exchanges have been secured from associations of a like nature, including some foreign societies. The attention which the "Studies" have received from scientific men everywhere encourages the society to continue this publication. The list of articles hitherto published is as follows:

VOLUME ONE.

A Rigorous Elementary Proof of the Binomial Theorem.—*F. H. Loud.*

On Certain Cubic Curves.—*F. H. Loud.*

A Study of the Inductive Theories of Bacon, Whewell and Mill. *Benj. Ives Gilman.*

A Mathematical Text-Book of the Last Century.—*Dr. F. Cajori.*

Horace, Od. III, 1, 34.—*George L. Hendrickson.*

Quinti Ciceronis, Commentariolum Petitionis XI, §43, (B. et K. Vol. IX, page 487).—*George L. Hendrickson.*

VOLUME TWO.

Witchcraft Among the Hindus.—*Dr. H. W. Magoun.*

Protection for Congressional Minorities.—*W. M. Hall.*

Pulsations in the Aortic Arches of the Earthworm.—*Miss M. R. Mann.*

Dialectic Studies in West Virginia.—*Dr. Sylvester Primer.*

The Study of Diophantine Analysis in the United States.—*Dr. F. Cajori.*

The Elliptical Functions Defined Independently of the Calculus. —*F. H. Loud.*

On two Passages in the Crito.—*Dr. H. W. Magoun.*

Calibration of Burettes.—*D. J. Carnegie.*

On a Passage in the Frogs.—*Dr. H. W. Magoun.*

Note on the Hadley-Allen Grammar.—*Dr. H. W. Magoun.*

Historical Note on the Differentiation of a Logarithm.—*Dr. F. Cajori.*

A Mathematical Error in the Century Dictionary.—*Dr. F. Cajori.*

VOLUME THREE.

The Etymologies in the Servian Commentary to Vergil.—*Dr. W. P. Mustard.*

Notes on Jefferson's Draft of the Ordinance of 1784.—*W. M. Hall.*

Some Notes on Blaydes' Nubes.—*Dr. A. T. Murray.*

On a Passage in Euripides' Iphigenia Taurica.—*Dr. A. T. Murray.*

Draper's Barograph.—*Dr. Florian Cajori.*

The Conditional in German.—*Dr. S. Primer.*

VOLUME FOUR.

The Circular Locus.—*F. H. Loud.*

On the Eight Lines Usually Prefixed to Horat. Serm. 1, 10.—*Dr. W. P. Mustard.*

State Bank Notes.—*W. M. Hall.*

VOLUME FIVE.

The Ethical Problem of the Public School System.—*W. F. Slocum.*

The Origin and Use of the Natural Gas at Manitou, Colorado (one plate).—*Wm. Strieby.*

Vertebrata from the Neocomian of Kansas (two plates).—*Dr. F. W. Cragin.*

The Choctaw and Grayson Terranes of the Arietina.—*Dr. F. W. Cragin.*

Descriptions of Invertebrate Fossils from the Comanche Series of Texas, Indian Territory and Kansas.—*Dr. F. W. Cragin.*

Herpetological Notes from Kansas and Texas.—*Dr. F. W. Cragin.*

VOLUME SIX.

The Permian System in Kansas.—*Dr. F. W. Cragin.*

On the Stratigraphy of the Platte Series, or Upper Cretaceous of the Plains.—*Dr. F. W. Cragin.*

Preliminary Notice of Three Late Neocene Terranes of Kansas.—*Dr. F. W. Cragin.*

VOLUME SEVEN.

Literature for Children.—*E. S. Parsons.*

Warming Up.—*Dr. E. G. Lancaster.*

Equations of Motion of Viscous Liquid (Part I).—*P. E. Doudna.*

VOLUME EIGHT.

Equations of Motion of a Perfect Liquid and a Viscous Liquid, When Referred to Cylindrical and Polar Co-ordinates (Part II).—*P. E. Doudna.*

The Capricorns, Mammals of an Asiatic Type, Former Inhabitants of the Pike's Peak Region.—*Dr. F. W. Cragin.*

Buchiceras (Sphenodiscus) Belviderensis and Its Varieties (two plates).—*Dr. F. W. Cragin.*
The Number Concept.—*Dr. F. Cajori.*

VOLUME NINE.

Remarks upon Clifford's Proof of Miguel's Theorum.—*Dr. F. H. Loud.*

La Femme dans les Chansons de Geste.—*H. A. Smith.*

A Study of Some Teleosts from the Russell Substage of the Platte Cretaceous Series.—*Dr. F. W. Cragin.*

Students are encouraged to attend the meetings of the Society.

The secretary of the Society, to whom all correspondence, exchanges, etc., should be addressed, is Professor Florian Cajori.

UNIVERSITY EXTENSION.

University extension work has been carried on uninterruptedly since 1894. A large number of courses and single lectures have been given throughout the state. It is the purpose of the college to expand this work as facilities and opportunities increase. During the past year courses were given by Prof. E. S. Parsons, Prof. L. A. E. Ahlers and Dr. E. G. Lancaster.

The following courses and single lectures form the program for 1900-'01:

President Slocum:

The Place of the College Graduate in Public Life.

Professor Ahlers:

1. Customs and Religion of the Primitive Aryan Races.
2. The Minnesingers.
3. Goethe and Schiller.
4. French Customs and Morals of the Present Day.
5. Rostand's Cyrano de Bergerac.
6. Rostand's L' Aiglon.
7. Hauptmann's Sunken Bell.
8. Sudermann's John the Baptist.

Professor Lancaster:

1. Child Study (twenty lectures.)
2. History and Philosophy of Education (fourteen lectures before the Woman's Club of Denver.)
3. Child Study (six lectures before the Woman's Club of Denver.)

Professor Urdahl:

Colonial Labor Problems.

Professor Shedd:

Snow Crystals.

Superintendent Moore, of the Portland Mine:

Practical Geology of Cripple Creek.

GLEE CLUBS.

The College Glee Club is in its fourth year, and is under the direction of Mr. George Crampton of the Musical Faculty. A Mandolin Club of twelve members has also been organized, and accompanied the Glee Club on its tour in the Easter vacation. The clubs gave concerts this year in the following places: Eaton, Greeley, Windsor, Fort Collins, Loveland, Long-

mont, Denver, Montclair, Pueblo and Colorado Springs, in this State, Laramie and Cheyenne in Wyoming.

The Young Women's Glee Club, under the leadership of Mr. Crampton, is now in its third year and is doing admirable work.

SPECIAL STUDENTS.

Special students will be received, at the discretion of the Faculty, into such classes as they are qualified to enter. It is the rule of the College that such students must attend the examinations as well as the ordinary recitations of their classes, subject to the same conditions as other students.

Several of the courses of lectures which form part of the College instruction, particularly in the department of Philosophy, are open to the public on payment of a small fee, and without any requirement of examination.

EXPENSES.

Tuition by the year	$35 00
Matriculation fee	5 00
Library fee	3 00
Table board in Montgomery Hall,* a week	2 50
Table board in Hagerman Hall (club for young men), a week	2 50
Table board in Ticknor Hall,† a week	4 00
Rooms,‡ warmed, furnished and lighted, a half-year, $20§ to	40 00
Fees of the College physician:	
Office consultation	50
Visits to rooms	1 00

For prolonged illness and in cases of contagious disease, a special nurse is employed, and the expenses are charged to the patient.

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*At the young woman's boarding club.

†Ticknor Hall is a residence for young women, but any person connected with the College may secure table board there.

‡Students rooming in Hagerman, Montgomery, Ticknor or South Hall are required to furnish towels, bed linen and blankets.

§The number of $20 rooms is limited. Others may be had at $25, $30, $35, $40. Application should be made early.

COLLEGE BILLS.

The bills for tuition and room rent are issued at the beginning of each half-year, and are payable immediately, unless special arrangements are made in the proper offices.

Students who withdraw before the end of the term pay full tuition. Students who withdraw less than six weeks before the end of the term pay full room rent. Board bills are payable monthly, in advance.

PECUNIARY ASSISTANCE.

SCHOLARSHIPS.—The income of the following scholarships is devoted to the aid of worthy students who may need assistance in completing their course, and who, by their scholarship and character, prove themselves worthy of such assistance.

The Thomas Davee Scholarship of $500, established by the late Mrs. T. V. D. Mitchell, of West Minot, Maine.

The Rice Scholarship of $700, established by friends of the Rev. Chas. B. Rice, D. D., of Danvers, Mass.

The Currier Scholarship of $1,000, founded by the late Hon. Warren Currier, of St. Louis, Mo.

The Edwards Scholarship of $500, given by the Congregational Church of Wellesley Hill, Mass.

The Mary Caroline Quincy Scholarship of $500, given by the late Mr. George Henry Quincy, of Boston, Mass.

The Lawrence Myers Scholarship of $1,000, and the Lucy Platt Myers Scholarship of $1,000, given by Mrs. Laetitia M. Myers, of Plainfield, New Jersey.

The Fay Scholarship of $1,000, founded by the late Eliza A. Fay, of Boston, Mass.

A Scholarship of $1,000, given by Mr. William F. Richards, of Newport, N. H., through the Woman's Educational Society of Colorado College.

The Willard B. Perkins Scholarship of $7,000. The second Willard B. Perkins Scholarship of $7,000. These two scholarships were given by the late Willard B. Perkins, of Colorado Springs.

The Hawley Scholarship Fund, now amounting to about $10,000, founded by the will of Mrs. Mary R. Hawley, of Baltimore, Md., the annual income of which is used in the payment of scholarships of such young women of the College as the Faculty may recommend, preference being given to those who are fitting themselves for Christian work.

The Hawley Memorial Fund, now amounting to about $7,500, founded by the will of Mrs. Mary R. Hawley, of Baltimore, Md., in memory of her husband, Mr. Martin Hawley, the annual income of which is loaned to "worthy and deserving students of the College, as the Faculty may see proper."

Several other scholarships are supported by annual subscription.

Self-Support.—Good scholars have opportunities for private teaching. Capable and faithful young men can find work in town, and there are many sources from which young women may derive an income while continuing their studies. Some students have paid all their expenses by current earnings.

THE HASTINGS PRIZE.

The sum of $500 has been given by Mr. F. R. Hastings of Colorado Springs, the income of which is to be used in providing prizes for the best two theses written by students in the course on the Evolution of Religious Thought.

THE WOMAN'S EDUCATIONAL SOCIETY OF COLORADO COLLEGE.

This Society was formed in April, 1889, by the women of Colorado Springs. Its purpose, as expressed in its constitution, "is to give physical, intellectual and spiritual aid to students in any department of Colorado College." This Society built Montgomery Hall, furnished Ticknor and South Halls, and has been of service in many ways to the College. Its members endeavor to come into personal relations with the students, especially with those who are supporting themselves; they try to find work for them, and by friendly advice assist them in their efforts to secure an education. The membership fees go to form a beneficiary fund, from which loans are made on the following conditions:

First—Loans may be made to students who have been in the College for one term and are recommended by the Faculty as in every way deserving of such aid.

Second—No student shall be allowed to incur an indebtedness to the Society of more than $300.

Third—Students may receive loans without interest until their connection with the College ceases; after that time their notes shall draw interest at four per cent.

The Society has received from Mr. William F. Richards, of Newport, N. H., a scholarship of $1,000

and from Mrs. Mary R. Hawley a legacy of $10,000, the interest of which is to be awarded each year to young women in the College who are recommended by the Faculty. This year six scholarships are offered from this fund to members of the Sophomore and Junior classes.

The officers for the current year are:

President—Mrs. William F. Slocum.

First Vice President—Mrs. John R. Hanna.

Recording Secretary—Mrs. Matthew Kennedy.

Corresponding Secretary—Mrs. William Strieby.

Treasurer—Mrs. Florian Cajori.

THE NEEDS OF THE COLLEGE.

Colorado College, never more truly than today, has great and pressing needs. The College stands upon a firm financial basis; but greater facilities in the way of equipment are an immediate necessity. The Trustees and Faculty feel it imperative that the opportunity for service which lies before the College, and the conditions by which this opportunity can be embraced, be understood. The urgent demands of the hour should be realized, not only by those who in previous years have nobly aided the College, but by all persons who are interested in the cause of learning, in the progress of science, and in the growth and development of the best educational institutions as a safeguard for republican government. Among the needs which force themselves upon attention are the following:

General Endowment.—The growth of the college has been so great that an increase of one million in its endowment funds is seriously needed.

Endowment of Professorships.—It is greatly to be desired that the chairs in the various departments be permanently endowed. This need has come to be urgent by reason of the rapid growth in numbers and the consequent demands for instruction and for more complete courses.

Funds for the Library.—The permanent fund for purchasing books is too small, and both the regular work of the College and the value of the Library to the city are seriously hampered by this limitation. The College appeals earnestly to lovers of books for money to use for this purpose, either to be added to the permanent fund or to be immediately expended for the pressing demands of the present moment.

Special Funds for Scientific Research.—Money to be devoted to scientific work in special lines is very greatly needed. The opportunities of Colorado College in this direction are unusual, because of the geographical, meteorological and geological situation. The attention of those interested in the advancement of science is earnestly called to this fact and to the statements in the article, "Museum," pp. 81-84.

Physical Apparatus.—The Physical Laboratory and the Observatory possess some very good apparatus, but a great deal more is needed for effective work in advance classes and for the purpose of original investigation. With a few thousand dollars our facilities could be immensely enlarged.

Museum Building.—The various scientific collections of the College have already outgrown the space allotted to them in Palmer Hall. A large number of

specimens which would be valuable for class-room work, as well as of general public interest, are still packed away because there is no room to exhibit them. A building permanently endowed which will adequately house these valuable collections and provide for the future is one of the great needs of the College.

Residence Halls.—It is hoped that the young men may soon be provided with another residence hall, as the need is most pressing. Ticknor, Montgomery and South Halls, which are used as homes for the young women of the College and Academy, are also found inadequate to supply the demand for rooms.

Scholarship Funds.—The Trustees desire to emphasize the fact that many young people in a new country are obliged to earn their education by hard and self-denying work. Colorado College needs a large addition to her scholarship funds. Money thus applied tends directly to the profit of the individual and of the country.

FORMS OF BEQUEST.

Those who intend to devise property to Colorado College, or to the Woman's Educational Society, are requested to employ one of the following Forms of Bequest:

"I hereby give, devise and bequeath unto The Colorado College, of Colorado Springs, Colorado, the sum of..... ..... Dollars."

"I hereby give, devise and bequeath unto The Woman's Educational Society of Colorado College, of Colorado Springs, Colorado, the sum of ..... Dollars."

If property other than money is willed, the form should be correspondingly varied.

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AND

Cutler Academy

1902.

Twenty-Eighth

Annual Bulletin

—OF—

COLORADO COLLEGE

—AND—

CUTLER ACADEMY

Colorado Springs, Colorado,
1902.

COLORADO SPRINGS:
THE GOWDY-SIMMONS PRINTING COMPANY.
1902.

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ANNOUNCEMENT.

Colorado College is the oldest institution of higher education in the State. In 1874, while Colorado was yet a territory, a College upon a broad Christian foundation was established in Colorado Springs. The authorized announcement for that year contains the following words:

"It is the purpose of the Trustees to build a College in which liberal studies may be pursued under positive Christian influences. . . . The college is under no ecclesiastical or political control. Members of different churches are on its board of trustees. . . . The character which is most desired for this college is that of thorough scholarship and fervent piety, each assisting the other, and neither ever offered as a compensation for the defects of the other."

From the beginning the Board of Trustees has been composed of leading professional and business men of Colorado, together with a few Eastern men of similar standing, and has ever been animated by the purpose avowed by the original Board.

A grant of land had been made in advance of the organization of the College, in 1873, by the Colorado Springs Company, the founders of the City of Colorado Springs. The Rev. Jonathan Edwards was the first professor and executive officer. The first President, the Rev. James G. Dougherty, was elected in 1875, and was succeeded in the following year by the Rev. E. P. Tenney. From 1885 to 1888 there was no President, but the work of teaching was carried on without interruption. At this time there was only one building on the campus, Palmer Hall, erected in 1880.

In the autumn of 1888 William Frederick Slocum was elected President. The faculty was at once enlarged, the courses re-organized, and Cutler Academy incorporated as an associated preparatory school, in which students have since been trained, not only for Colorado College, but for all the leading institutions of the United States. Within the following two years $100,000 was given toward endowment, entirely from within the State of Colorado. Hagerman Hall was built in 1889. In the same year the Woman's Educational Society was organized and began the work of building Montgomery Hall. In 1890 the Colorado College Scientific Society was founded, and the first instalment of its annual publication, "Colorado College Studies," was issued.

Within the past decade the sum of $400,000 has been added to the endowment, and the growth of the College in numbers has been equalled by an appropriate enlargement of equipment and activity. Among the marks of advance are the Gymnasium, built by the efforts of students; the Library building, given by the late N. P. Coburn; the Observatory, the gift of Henry R. Wolcott, of Denver; and Ticknor Hall, completed during the closing days of 1897, as a second dwelling house for young women. The entire cost of this beautiful building, exceeding $23,000, was met by a single donor who insisted upon remaining unknown. In 1900 the Perkins Fine Arts Hall was built at a cost of $30,000. The first floor is an auditorium, used for the religious services of the College and other public meetings. The second story is occupied by the Department of Fine Arts and the Conservatory of Music.

During the past year $240,000 has been secured for the erection and endowment of an Administration and Science building. It will contain the general offices of

administration and a complete equipment for scientific work in all departments. Work upon the building has already begun and the corner-stone was laid March 3, 1902.

Growth in other directions during the last six years is indicated by the establishment of a course leading to the degree of Bachelor of Science, by the University Extension work, by the addition of an Art Department, and by the founding of the Conservatory of Music, which, while preserving its proper relation to the academical departments, successfully maintains an equally high educational standard. While not without needs that are keenly felt, the College has won an assured position, and offers to its students educational facilities of the same grade as are found at Eastern institutions of the higher learning.

TRUSTEES.

William F. Slocum, *President of the Board*,	24 College Place.
George W. Bailey, . . .	1600 Emerson St., Denver.
Rev. David N. Beach, D. D., . .	1264 Race St., Denver.
William P. Bonbright, . . .	1222 N. Cascade Ave.
Rev. W. H. W. Boyle, D. D., . . .	319 E. Bijou St.
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Frank Trumbull, ...	1439 Franklin St., Denver.

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INSTRUCTION.

Philip B. Stewart, *Chairman;* W. H. W. Boyle, John Campbell, James B. Gregg, Horace G. Lunt.

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WILLIAM F. SLOCUM, President. EDWARD S. PARSONS, Vice-Pres.
JAMES B. GREGG, Secretary. GEORGE N. MARDEN, Treasurer.

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Dr. S. E. Solly.
Mrs. A. E. Touzalin.
Prof. T. K. Urdahl.

FACULTY.

WILLIAM FREDERICK SLOCUM, D. D., LL. D. 24 College Place.
President and Head Professor of Philosophy.
A. B. (Amherst), '74; B. D. (Andover), '78; LL. D. (Amherst), '93; LL. D. (Nebraska), '94; D. D. (Beloit), '01; Colorado College, '88.

LOUIS A. E. AHLERS, A. B. South Hall.
Head Professor of Modern Languages and Literatures.
A. B. (Harvard), '94; Colorado College, '95.

ERNEST BREHAUT, A. M. 611 N. Tejon St.
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A. B. (Dalhousie), '94; A. B. (Harvard), 96; A. M. (*ibid.*), '97; Colorado College, '98.

FLORIAN CAJORI, PH. D. 1119 Wood Ave.
Head Professor of Mathematics.
S. B. (Wisconsin), '83; M. S (*ibid.*), '86; PH. D. (Tulane), '94; Assistant Professor of Mathematics, Tulane, '85-'87; Professor of Applied Mathematics, Tulane. 87-'88; United States Bureau of Education, '88-'89; Colorado College, '89.

ANNA PEARL COOPER, A. B. 17 N. Wahsatch Ave.
Instructor in English and History.
A. B. (Colorado College),'96; Colorado College, '99.

FRANCIS WHITTEMORE CRAGIN, PH. D. 1715 Wood Ave.
Professor of Geology, Mineralogy, and Palæontology.
Agassiz Laboratory, Newport, '81; S. B. (Harvard), '82; PH. D. (Johns Hopkins), '99; Professor of Natural History, Washburn, '82-'91; Assistant Geologist, State Geological Survey of Texas, '92-'93; Colorado College, 91.

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A. B. (Brown), '83; A. M. (*ibid.*), '86; Instructor in Phillips Academy, Andover, Mass, '83-'92; Assistant Professor of Greek, Chicago, '92-'94; Colorado College, '92.

RUBIN GOLDMARK, A. M.
Director of the Conservatory of Music, and Professor of Harmony, Counterpoint and Composition.
Conservatory of Music, Vienna, '89-'91; Pupil of Rafael Joseffy and Anton Dvorak, '91; A. M. (Colorado College), '99; Instructor National Conservatory of Music, New York, '91-'93; Colorado College, '95.

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PH. B. (Colorado College), '99; Colorado College, '01.

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Worcester, (Mass.), Polytechnic Institute, '83-'85; PH. B. (Colorado College), '91; A. M. (*ibid.*), '92; Colorado College, '99.

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A. B. (Amherst), '85; A. M. (*ibid.*), '88; B. D. (Andover), '89; PH. D. (Clark), '97; Colorado College, '97.

RUTH LOOMIS, A. B. Ticknor Hall.

Dean of Women.

A. B. Vassar, '85; Instructor in English, Vassar, '86,-'95; Colorado College, '96.

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A. B. (Amherst), '73; A. M. (Harvard), '99; PH. D. (Haverford), '00; Walker Instructor in Mathematics, Amherst, '73-'76; Instructor in Geometry, Smith, '79; Colorado College, '77.

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M. D. (University of Colorado), '93; Clinical Obstetrician, University of Colorado, '93-'95; Post Graduate, School of Medicine and Polyclinic, New York, '95; Allgemein Polyclinic, Vienna, '96; Colorado College, '95.

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S. B. (Colorado College), '01; Colorado College, '01.

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A. B. (Missouri), '97; A. M. (*ibid.*), '98; Assistant in the Department of Romance Languages, Missouri, '97-'98; Colorado College, '99.

LOUIS JEANNERET SOUTTER. Plaza Hotel.

Director of the Department of Art and Design, and Instructor in Drawing and Painting.

Graduate, University of Lausanne, '90; Student, Royal Conservatory of Music, Brussels, under Eugene Ysaye, '92-'95; Student, Ecole des Beaux Arts and Colarossi Atelier, Paris, '95-'98; Pupil of Benjamin Constant and Jean Paul Laurent, '99; Colorado College, '98.

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Professor of Chemistry and Metallurgy.

A. B. (University of New York), '75; E. M. (Columbia School of Mines), '78; A.M. (University of New York), '79; Principal Santa Fe Academy, '78-'80; Colorado College, '80.

THOMAS K. URDAHL, PH. D. 1111 Wood Ave.

Professor of Political and Social Science.

B. L. (Wisconsin), '91; M. L. (*ibid.*), '92; PH. D. (*ibid.*), '97; Assistant in Economics (*ibid.*), '99 '00; Colorado College, '00.

FRANCES SEDGWICK WIGGIN, B. L. South Hall.

Librarian.

B. L. (Wisconsin), '82; Colorado College, '98.

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GEORGE CRAMPTON. 24 E. Dale St.

Instructor in Voice Culture, Sight Reading and Ear Training.

Royal College of Music, London, '94; pupil of Sir C. Hubert Parry, Dr. C. V. Stanford, Sir. Walter Parrutt, and Henry Blower; Colorado College, '99.

CLARENCE WILBER BOWERS. 1005 N. Wahsatch Ave.

Instructor in Piano-forte, Organ, Harmony and Counterpoint.

Graduate, New England Conservatory of Music, Boston; Pupil of G. W. Chadwick and Ferruccio Busoni, '90-'92; Pupil of Alexandre Guilmant, Paris, '95-'96; Organist and Instructor in Music in Seminary and Academy, Andover, Mass., '91-'92; Professor of Instrumental Music and Harmony, Cornell College, Mt. Vernon Iowa, '92-'95; Colorado College, '96.

MRS. ROBERT BRISCOE. 1003 N. Wahsatch Ave.

Instructor in Violin.

Graduate, Conservatory of Leipsic, '95; pupil of Hans Sitt, '90-'95; Colorado College, '00.

MRS. GEORGE CRAMPTON. 24 E. Dale St.

Assistant in Vocal Music.

Guildhall School of Music, London, '95; Colorado College, '01.

MRS. MAUD S. FAUST. 21 E. Platte Ave.

Instructor in Piano-forte.

The Vassar Music School, '94; Diploma American Society of Musicians, '94; Colorado College, '01.

OMA FIELDS. 808 N. Weber St.

Instructor in Piano-forte.

Graduate, New England Conservatory of Music, '89; Pupil of Leschetitzky Vienna, '96; Colorado College, '94.

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ATHLETICS.

Prof. Ahlers, *Chairman*; Prof. Cajori, Prof. Smith.

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MUSIC.

Mr. Crampton, *Chairman;* Prof. Parsons, Miss Loomis.

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SCHEDULE AND PUBLICATIONS.

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SCHOLARSHIPS.

The President, *Chairman;* Profs. Parsons, Gile, Cragin.

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Prof. Lancaster, *Chairman*; Mr. Ritchie, Miss Cooper.

HAGERMAN HALL.

Prof. Shedd, *Chairman*; Profs. Gile, Lancaster.

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Seniors—The President.	IV—Mr. Pattison.
Juniors—Prof. Lancaster.	III—Prof. Noyes.
Sophomores—Prof. Ahlers.	II—Miss Cooper.
Freshmen—Prof. Cajori.	I—Prof. Smith.
Special Students—Prof. Strieby.	*Special Students*—Mr. Brehaut.

CALENDAR.

1902.

March	26	Wednesday	Easter Recess begins at 1 P. M.
April	3	Thursday	Easter Recess ends at 8.30 A. M.
May	30	Friday	Memorial Day; a holiday.
June	9	Monday	Examinations begin. First Entrance Examinations begin.
June	15	Sunday	Baccalaureate Sermon.
June	16	Monday	Class Day.
June	17	Tuesday	Cutler Academy Graduation.
June	18	Wednesday	Commencement.
Sept.	9	Tuesday	Second Entrance Examinations begin.
Sept.	10	Wednesday	First half-year begins at 8:30 A. M.
Nov.	4	Tuesday	Election Day.
Nov.	5	Wednesday	Insignia Day.
Nov.	27	Thursday	Thanksgiving Day; a holiday.
Dec.	19	Friday	Christmas recess begins at 5 P. M.

1903.

Jan.	6	Tuesday	Christmas Recess ends at 8:30 A. M.
Jan.	26	Monday	Mid-year Examinations begin.
Jan.	29	Thursday	Day of Prayer for Colleges.
Feb.	2	Monday	Second Half-year begins at 8:30 A. M.
April	8	Wednesday	Easter Recess begins at 1 P. M.
April	16	Thursday	Easter Recess ends at 8:30 A. M.
May	30	Saturday	Memorial Day; a holiday.
June	1	Monday	Examinations begin. First Entrance Examinations begin.
June	7	Sunday	Baccalaureate Sermon.
June	8	Monday	Class Day.
June	9	Tuesday	Cutler Academy Graduation.
June	10	Wednesday	Commencement.

ADMISSION.

REGISTRATION.

Before registering, each candidate must present to the Dean a certificate of moral character signed by some responsible person in the community in which he has made his home. Students are required to register promptly and attend the first exercises in their courses.

ENTRANCE EXAMINATIONS.

Candidates for admission to the Freshman Class, unless admitted by certificate (see p. 19), must pass examinations in one of the following groups:

A. B. GROUP.

1. GREEK.—(*a.*) A thorough knowledge of Grammar and Accentuation. (*b.*) Four books of the Anabasis. (*c.*) Three books of the Iliad, with prosody and dialectic forms. (*d.*) Translation at sight of average passages from Xenophon and Homer. (*e.*) The translation into Greek of a passage of connected discourse. (Collar and Daniell's Greek Prose Composition, or an equivalent.) (*f.*) An outline knowledge of Greek history.

2. LATIN.—(*a.*) An accurate and ready knowledge of grammatical forms. (*b.*) Cæsar: Gallic War, Bks. I-IV, or an equivalent. (*c.*) Cicero: seven orations, (*d.*) Vergil: Aeneid, Bks. I-VI. (*e.*) Translation at sight of easy passages of prose Latin. (*f.*) Prose Composition (Daniell, or Moulton and Collar.) (*g*) An outline knowledge of the history of the Roman Republic.

3. ENGLISH.—(*a.*) The candidate will be required

to write a short essay which will be judged from the standpoint of thought, spelling, punctuation, grammar and division into paragraphs, on topics chosen, in 1902, from the following works:

Shakespeare's Merchant of Venice; Pope's Iliad, Books I, VI, XXII and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

In 1903 Shakespeare's Julius Cæsar and Carlyle's Essay on Burns will be substituted for Pope's Iliadi and Cooper's Last of the Mohicans.

All these books are to be read carefully and intelligently. Minute knowledge of them will not be required, but the candidate will be expected to have clearly in mind their important parts.

(*b.*) In addition to the above, the candidate will be required to pass an examination on the subject matter, form and other literary qualities of the following books: Shakespeare's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

A mastery of the essentials of English Grammar will also be required of all candidates.

4. German or French. — A good elementary knowledge of the language, sufficient for reading easy prose at sight. See outlines of courses, "German A" and "French A," on pp. 34 and 35 respectively.

5. Mathematics.—(*a.*) Algebra, through simultaneous quadratic equations. (*b.*) Elementary Plane Geometry: the equivalent of the first five books of

Beman and Smith's, or Phillips and Fisher's or Wentworth's Geometry. (*c.*) After 1903, Solid Geometry.

Candidates who have completed the entrance requirements for the Ph. B. course, but wish to enter the A. B. course, will be allowed to do so on condition that they take Greek through all four years.

Ph. B. Group.

1. Latin, English, German or French, and Mathematics.—As in the A. B. Group.

2. Physics.—One year of work: not less than two hours per week of recitation, and four of laboratory work; Carhart and Chute's Elements of Physics, or Wentworth and Hill's Text-Book of Physics, or an equivalent.

3. Chemistry.—Williams' Elements of Chemistry, or an equivalent.

4. Botany.—Gray's Lessons (revised edition), or Bergen's Elements of Botany.

5. Physiology.—Martin's Briefer Course, or an equivalent.

6. American or English History.—An outline knowledge of the leading facts.

S. B. Group.

1. Physics, Chemistry, Botany, Physiology, American or English History, and English.—As in the Ph. B. Group.

2. Languages.—Latin, German or French, amounting collectively to four full years of work, two of which must be in Latin or German.

3. Mathematics.—(*a.*) Algebra, through simultaneous quadratic equations; (*b.*) Plane Geometry: the equivalent of the first five books of Beman and Smith's, or Phillips and Fisher's, or Wentworth's Geometry;

(*c.*) either Solid and Spherical Geometry, or Plane Trigonometry.

Admission by Certificate.

Candidates who offer satisfactory evidence of having completed a preparatory course equivalent to any one of the above named groups, will be admitted without condition into the Freshman Class in the corresponding course. Each candidate must bring from his principal a personal statement as to his grade of scholarship.

Accredited Schools.

The following schools are on the accredited list; certificates of the satisfactory completion, in any of them, of any branch in the course of study required for admission to the College, will be accepted in lieu of examination.

Aspen High School.
Canon City High School.
Canon City So. Side High School.
Central City High School.
Cheyenne (Wyo.) High School.
Colorado Springs High School.
Cripple Creek High School.
Delta High School.
Denver: High School, Dist. No. 1.
" High School, Dist. No. 2.
" High School, Dist. No. 7.
" High School, Dist. No. 17.
" Manual Training High School.
Douglas Co. H. S., Castle Rock.
Durango High School.
Florence High School.
Fort Collins High School.
Fort Morgan High School.
Georgetown High School.
Golden High School.
Gordon Academy, Salt Lake City.
Grand Junction High School.
Greeley High School.
Idaho Springs High School.
Jarvis Hall, Montclair.
Leadville High School.
Longmont High School.
Manitou High School.
Montclair High School.
Monte Vista High School.
Otero Co. High School, La Junta.
Ouray High School.
Pueblo High School, Dist. No. 1.
" High School, Dist. No. 20.
Salida Academy.
Salida High School.
Telluride High School.
Trinidad High School.
Victor High School.
Walsenberg High School.
Wheat Ridge High School, Alcott.
Miss Wolcott's School, Denver.
Wolfe Hall, Denver.

ENTRANCE EXAMINATIONS.

Examinations for admission to the College will take place on Monday and Tuesday, June 9 and 10, 1902, and again on Tuesday, September 9, 1902. They are held in Palmer Hall, beginning at 9 A. M. No examination will be held between these dates, but delayed examinations may be held after the beginning of the fall term for the accommodation of students who, for good reason, have been unable to attend at the regular time.

For the accommodation of students residing at a distance, examinations will be held under the direction of authorized persons at various points in and near the State, as need may require. The cities of Cheyenne, Wyo., Denver, Pueblo, Trinidad, Leadville, Montrose and Grand Junction, Colo., and Las Vegas, N. M., are points where such arrangements can readily be made, and others may be added, if necessary. But students who desire examinations at these or other points must notify the President at least three weeks in advance of the time of the regular examination.

ADMISSION TO ADVANCED STANDING.

Students will be received into advanced classes on examination in the studies of the preceding year. The Faculty may, at their discretion, receive certificates from other colleges as evidence that the student has satisfactorily pursued those or equivalent studies.

COURSES OF STUDY.

Three courses of study are offered in the College. The course leading to the degree of Bachelor of Arts corresponds to that which the best Eastern Colleges require for the same degree. In the course leading to

the degree of Bachelor of Philosophy there is no Greek, and less Latin than in the course for Bachelor of Arts; but the required work includes more of the Sciences and Modern Languages. The course leading to the degree of Bachelor of Science is so arranged that special attention may be devoted to any one of five principal lines of study, Mathematics, Physics, Chemistry, Biology or Geology.

For graduation a student must have completed an average of seventeen hours per week throughout the four years (total requirement 67 and 1-2 hours.)

OUTLINE OF COURSES.

Freshman Yr.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	Mathematics A (a) (p. 39)	4	Mathematics A (a) (p. 39)	4	Mathematics A (a) (p. 39)	4
	French B (p. 35) or German B (p. 34)	4	French B (p. 35) or German B (p. 34)	4	French or German (pp. 35, 34)	4
	English B (p. 32)	3	English B (p. 32)	3	English B (p. 32)	3
	Greek A (p. 31)	3	Latin A (p. 32) or French A* (p. 35) or German A* (p. 34)	3 / 4 / 4	Chemistry B (p. 41)	4
	Latin A (p. 32)	3	Biology A (p. 42)	3	Biology A (p. 42)	3
		17		17 or 18		18
Second Half	Mathematics A (b) (p. 39)	2	Mathematics A (b) (p. 39)	2	Mathematics A (c) (p. 39)	2
	Mathematics A (c) (p. 39)	2	Mathematics A (c) (p. 39)	2	French or German (pp. 35, 34)	4
	French B (p. 35) or German B (p. 34)	4	French B (p. 35) or German B (p. 34)	4	English B (p. 32)	3
	English B (p. 32)	3	English B (p. 32)	3	Chemistry B (p. 41)	4
	Greek A (p. 31)	3	Latin A (p. 32) or French A* (p. 35) or German A* (p. 34)	3 / 4 / 4	Biology A (p. 42)	3
	Latin A (p. 32)	3	Biology A (p. 41)	3		16
		17		17 or 18	(Choose courses to make a total of 18 or 19 hrs.)	
	Elective.				Physics G (p. 40)	2
	Mathematics A (d) (p. 39)	2			Mathematics A (d) (p. 39)	2
					Mathematics D (p. 39)	2
					Meteorology (p. 40)	2
					Biology C (p. 43)	3
						18 or 19

* Whichever was not offered as part of the preparation for College.

SOPHOMORE YR.	A. B. COURSE.		PH. B. COURSE.		S. B. COURSE.	
		HRS		HRS.		HRS.
FIRST HALF.....	English C (p. 32)	3	French or German (pp. 35, 34)	4	French or German (pp. 35, 34)	4
	French or German (pp. 35, 34)	3	Chemistry B (p.41)	4	English C (p 32)	3
	Physics A* (p. 40)	4	Physics A (p. 40)	4	Physics C (p. 32)	5
	or		English C (p. 32)	3	Additionalr equirement (p. 24)	5 or 6
	Biology A* (p. 42)	3		15		17 or 18
	9 or 10					
	Elective.		*Elective.*			
	(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)		(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)			
	Latin B (p. 32)	3	Latin B (p. 32)	3		
	Public Speaking B (p. 33)	2	Public Speaking B (p. 33)	2		
	Greek B (p 31)	3	Mathematics B (a) (p. 39)	3		
	Mathematics B (a) (p. 39)	3	Mathematics C (p. 39)	3		
	Astronomy A (p. 40)	3	Astronomy A (p. 40)	3		
	History A‡ (p. 38)	2	History A‡ (p. 38)	2		
	Bible (p. 46)	1	Bible (p. 46)	1		
	Biology A (p. 42)	3		17 or 18		
	17 or 18					
SECOND HALF.....	English D (p. 32)	3	French or German (pp. 35 34)	4		
	French or German (pp. 35, 34)	3	Chemistry B (p. 41)	4	English D (p. 32)	3
	Physics A* (p. 40)	4	Physics A (p. 40)	4	French or German (pp. 35, 34)	4
	or			12	Physics B (p 40)	5
	Biology A* (p 42)	3			Additional requirement (p. 24)	5 or 6
	9 or 10					17 or 18
	Elective.†		*Elective* †			
	(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)		(CHOOSE COURSES TO MAKE A TOTAL OF 17 OR 18 HRS.)			
	Latin B (p. 32)	3	‖English D (p. 32)	3		
	Greek B (p 31)	3	Latin B (p. 32)	3		
	Greek Art (p 31)	2	Public Speaking B (p. 33)	2		
	Public Speaking B (p. 33)	2	Mathematics B (b) (p 39)	3		
	Mathematics B (p. 39)	3	Mathematics C (p. 39)	4		
	Mathematics D (p 38)	2	Mathematics D (p. 39)	2		
	History A‡ (p. 38)	2	History A‡ (p. 38)	2		
	Astronomy B (p. 40)	4	Economics F (p. 37)	2		
	Economics F (P. 37)	2	Astronomy B (p. 40)	4		
	Bible (p. 46)	1	Bible (p. 46)	1		
	Biology A (p. 42)	3	Greek Art (p. 31)	2		
	Biology C (p. 43)	3	Biology C (p. 43)	3		
	17 or 18			17 or 18		

* Both these subjects may be taken, or both may be omitted if the student takes Chemistry A in his Junior year.

† Courses continuing through the year may not be dropped at the half-year. They may, however, be entered at the second half with the consent of the instructor.

‡ History amounting to 2 hours for one year must be included in the student's course.

‖ A half-year of English Literature must be included at some time in the student's course.

OUTLINE OF COURSES—CONTINUED.

Junior Year.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3
	Economics A (p. 37)	4	Geology A (p. 44)	4	Geology A (p. 44)	4
	Chemistry A* (p. 41)	4	Economics A (p. 37)	4	Additional requirement (p. 24)	4
	Electives (pp. 25-28)	6 or 10	Electives (pp. 25-28)	6	Electives† (pp. 25-28)	6
		17		17		17
Second Half	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3
	Chemistry A* (p. 41)	4	Geology A (p. 44)	4	Geology A (p. 44)	4
	Electives (pp. 25-28)	10 or 14	Electives (pp. 25-28)	10	Additional requirement (p. 44)	4
		17		17	Electives† (pp. 25-28)	6
						17
Senior Year.						
First Half	Philosophy C (p. 29)	4	Philosophy C (p. 29)	4	Philosophy C (p. 29)	4
	Electives (pp. 25-28)	13	Electives (pp. 25-28)	13	Additional requirement (p. 24)	4
		17		17	Electives (pp. 25-28)	9
Second Half	Philosophy D (p. 30)	4	Philosophy D (p. 30)	4	Philosophy D (p 30)	4
	Electives (pp. 25-28)	12	Electives (pp. 25-28)	12	Additional requirement (p. 24)	4
		16		16	Electives (pp. 25-28)	8
						16

* Required only of students who have had neither Physics A nor Biology A in the Sophomore year.
† History amounting to 2 hours for one year must be included in the student's course.

ADDITIONAL REQUIREMENTS IN S. B. COURSE.

Course in Pure Mathematics and Astronomy.		Course in Physics.	HRS.	Course in Biology.	HRS.	Course in Geology.	HRS.	Course in Chemistry.	HRS.
Sophomore Year.									
First Half.									
Mathematics B (a) (p. 39)	3	Mathematics B (a) (p. 39)	3	Mathematics B (a) (p. 39)	3	Mathematics B (a) (p. 39)	3	Mathematics B (a) (p. 39)	3
				or		or		or	
Mathematics C (p. 39)	3	Mathematics C (p. 39)	3	Astronomy A (p. 39)	3	Astronomy A (p. 39)	3	Astronomy A (p. 39)	3
				Biology B (p. 43)	2	Geology B (p. 44)	3	Chemistry C (p. 41)	3
	6		6		5		6		6
Second Half.									
Mathematics C (p. 39)	4	Mathematics C (p. 39)	4	Biology B (p. 43)	3	Biology C (p. 43)	3	Chemistry C (p. 41)	6
Mechanical Drawing	2	Mechanical Drawing	2	Biology C (p. 43)	3	Geology F (p. 45)	3		
	6		6		6		6		
Junior and Senior Years.									
Mathematics and Astronomy (pp. 39-40)	4	Physics (p. 40)	4	Biology (p. 42)	4	Geology (p. 44)	4	Chemistry (p. 41)	4

ELECTIVE COURSES.

Unless otherwise stated, each Elective Course continues through the year. Not all the Electives will be given in any one year.

PHILOSOPHY.—(p. 28.) HOURS PER WEEK.

B. *Psychological Seminary* 1
E. *Modern German Philosophy;* first half year 2
F. *The Philosophical Movement in England;* second half-year 2
G. *Advanced Logic*; second half year 2
H. *Lotze;* second half-year 2
I. *Seminary in Social Ethics;* second half-year 1
J. *Seminary in Greek Philosophy;* one half-year 1
K. *Evolution of Religious Thought;* second half-year 2

PEDAGOGY.—(p.31.)

A. *History and Philosophy of Education;* first half-year. 2
B. *School Hygiene and Child Study;* second half-year ... 2
C. *Original Observations* 1
D. *Pedagogical Seminary* 1

GREEK.—(p.31.)

B. *Drama* 3
C. *History;* one half-year 3
D. *Philosophy;* one half-year 3
E. *Epic and Lyric Poetry;* one half-year 3
F. *Course for Teachers;* one half-year 3
G. *Greek Art;* second half-year 2

LATIN.—(p.32.)

C. *Drama;* one half-year 3
D. *Catullus and the Elegiac Poets;* one half-year 3
E. *Satire;* one-half year 3
F. *Roman Life* 3
G. *Vergil;* one half-year 3
H. *Course for Teachers;* one half year 3

ENGLISH.—(p.32.)

D. *American Literature;* second half-year 3
E. *Early English Literature;* first half-year 3
F. *Middle English;* second-half year 3
G. *Chaucer and Spenser;* first half-year 3
H. *English Drama;* first half-year 3
I. *Shakespeare;* second half-year 3
J. *Shakespeare* 2
K. *Milton;* first half year 3

HOURS PER WEEK

L. *Beginnings of Romanticism;* first half-year..... 3
M. *Influence of French Revolution;* second half-year..... 3
N. *Tennyson and Browning;* first half-year..... 3
O. *English Prose;* second half-year..... 3
P. *Old English;* first half-year..... 3
Q. *Béowulf;* second half-year..... 3
R. *Lyrics and Sonnets;* second half-year..... 2

PUBLIC SPEAKING.—(p.33.)

B. *Oratory*..... 2
C. *Forensics;* first half-year..... 3
D. *Extempore Speaking;* first half-year 1

GERMAN.—(p. 34.)

C. *Schiller and Goethe;* first half-year..... 2
D. *Lessing and Goethe;* second half-year..... 2
E. *History of German Literature*..... 1
F. *The Nibelungenlied*..... 2
G. *Middle High German;* one half year..... 3
H. *Gothic*..... 2
I. *Faust*..... 2
K. *Poetry of Goethe and Schiller*..... 2

FRENCH.—(p.35.)

C. *Classic Period;* first half-year..... 2
D. *Nineteenth Century Literature;* second half-year ... 2
E. *Molière*..... 2
F. *Critical Study of Classic Authors;* first half year. ... 2
G. *Lyric Poetry;* second half-year 2
H. *Old French*..... 2

SPANISH.—(p. 36.)

A. *Elementary Course*..... 3
B. *Advanced Course*..... 2

ITALIAN.—(p.36.)

A. *Elementary Course* 3

ECONOMICS.—(p. 37.)

B. *Charities and Crime;* second half-year 3
D. *Socialism;* first half-year..... 3
F. *Economic History;* second half-year..... 2
G. *Public Finance;* second half-year..... 3

POLITICAL SCIENCE.—(p. 38)

C. *Elementary Law;* first half-year..... 3
D. *American Constitutional Law;* second half-year.... 3

		HOURS PER WEEK
History.—(p. 38.)		
A.	*English*	2
B.	*American* — first half year	2
	American — second half year	3
D.	*Modern European History;* second half-year	2
Mathematics —(p. 39.)		
B. (*a*)	*Analytical Geometry* (elementary); first half-year	3
B. (*b*)	*Analytical Geometry* (more advanced); second half-year	3
C.	*Calculus, Differential and Integral;* — first half-year	3
	Calculus, Differential and Integral; — second half-year	4
D.	*History and Logic of Mathematics*; one half-year	2
E.	*Modern Methods in Geometry;* one half-year	3
F.	*Theory of Equations;* one half-year	3
G.	*Elementary Theory of Functions;* one half-year	3
H.	*Elements of Substitution Groups*; one half-year	3
I.	*Elementary Surveying;* second half-year	3
Astronomy—(p. 40.)		
A.	*Descriptive Astronomy*; first half year	3
B.	*Observations and Computations;* second half-year	4
C.	*Mathematical Astronomy*	2
D.	*Meteorology;* second half-year	2
Physics.—(p. 40.)		
C. (*a*)	*Theoretical Physics*	2
C. (*b*)	*Theoretical Physics* (advanced)	2
D.	*Practical Physics*	2
E.	*Lectures on Advanced Physics*	1
F.	*Seminary*	1
G.	*Problem Work;* second half-year	2
Chemistry.—(p. 41.)		
C.	*Qualitative Analysis;* — first half year	3
	Qualitative Analysis; — second half-year	6
D.	*Quantitative Analysis*	4
E.	*Organic Chemistry*	4
F.	*Theoretical Chemistry*	3
Biology.—(p. 42.)		
A.	*Elementary Biology*	3
B.	*Botany*	3
C.	*Zoology;* second half-year	3
D.	*Comparative Anatomy of Invertebrates;* first half-year	3
E.	*Comparative Anatomy of Vertebrates;* second half-year	3
F.	*Histology;* first half-year	3
G.	*Physiology;* second half-year	3

HOURS PER WEEK

H. *Embryology;* second half-year 3
I. *Bacteriology;* first half year 3

GEOLOGY.(p.44.)

A. *Inorganic and Organic Geology* 4
B. *Mineralogy;* first half-year 4
C. *Advanced Mineralogy;* second half-year 2
D. *Crystallography;* first half-year 2
E. *Economic Geology;* first half-year 4
F. *Invertebrate Palæontology;* second half-year 3
G. *Vertebrate Palæontology;* second half-year 3
H. *Petrography;* second half-year 3

BIBLE STUDY.—(p. 46.)

Old Testament Literature 1

THEORY OF MUSIC.

Harmony 2
Counterpoint 2

A student for any degree is usually permitted to take as an elective any study required for another degree that does not appear in the course required for his own degree, and that does not introduce a conflict of hours. But, for this purpose, French A counts as 3 hours only.

DEPARTMENTS OF INSTRUCTION.

PHILOSOPHY.

PRESIDENT SLOCUM, ASSISTANT PROFESSOR LANCASTER.

The required work in this department extends over the whole of the Junior and Senior years, and gives the student a knowledge of the development of thought in the several departments of philosophy. The various Seminary courses afford training in the study and discussion of important psychological, sociological and ethical questions.

A. *Psychology.*—3 hours.

1. *Neurology.*—Lectures on the brain and nervous system, with careful dissections, by the class, of brains of animals, and study of the human brain. 8 weeks—DR. LANCASTER.
2. *Animal Intelligence.*—Lectures, reading of Romanes, Morgan, Binet and others. A study of comparative

neurology of animals, with a thesis by each member of the class on the nervous development of some species of animal, compared with the habits and environment of the same animal. 6 weeks.—DR. LANCASTER.

3. *Experimental Psychology.*—Lectures, recitations and experiments, based on Sanford's *Handbooks.* 4 weeks.—DR. LANCASTER.

4. *General Psychology and Logic.*—James' *Principles of Psychology*, *Briefer Course*, recitations, lectures, parallel readings and observations. Jevon's *Elementary Lessons in Logic.* Second half-year.—Dr. LANCASTER. *Lectures*:

   (a) Introductory Series.—PRESIDENT SLOCUM.

   (b) Cerebral Localization and the Relation of Thought to Brain Activity. Four Lectures.

5. *Psychological Laboratory.*—Opportunity will be afforded for the conducting of experiments in special lines.

B. *Psychological Seminary.*— The leading subjects in Modern Psychology. Theses and Discussions. Study of the following subjects: The Relations of Mind and Body; Double Consciousness; Animal Psychology; The Psychology of Defectives; Mental Evolution in Man; Unconscious Cerebration; Diseases of the Memory; Diseases of the Will; Dreams; The Psychology of Music; Hallucinations; Power of Suggestion; Aphasias; Muscle Memory; Psychology of Fear; Hypnotism; Sanity and Insanity; Genius. Each student is also required to select some one subject for independent study and investigation during the year. 1 hour.—DR. LANCASTER.

C. *History of Philosophy.*—First half-year, 4 hours.—PRESIDENT SLOCUM.

1. Lectures, recitations and conferences, 3 hours.

   (a.) Study in Comparative Religions.

   (b.) Greek Philosophy. Twenty Lectures.

   (c.) Modern Philosophy. Fifteen lectures. (1.) The Rise and Fall of Scholasticism; (2) The Beginnings of Modern Philosophy—Bacon and Descartes; (3) Spinoza; (4) Locke; (5) The Sceptical Movement in France; (6) Leibnitz; (7) Berkeley; (8) Hume; (9) Kant, the Critique of Pure Reason; (11) Kant, the Transcendental Element in his Philosophy; (12) Hegel; (13)Schopenhauer; (14)

Lotze; (15) Spencer—The Philosophy of Evolution.

2. *Metaphysical Seminary.*—1 hour.

Presentation of papers and discussion of the following subjects:

(a) The Great Religions of the World.

(b) The Psychological Basis of Religious Faith.

(c) The Psychological Basis of Æsthetics.

(d) Philosophical Thought in England during the Nineteenth Century.

(e) Evolution: Its History, Development and Results.

D. *Ethics.*—Second half-year, 4 hours.—PRESIDENT SLOCUM.

1. *Janet's Theory of Morals.*—Lectures, theses and discussions. 3 hours.

Lectures:

(a.) The Fundamental Principles of Ethics. 12 lectures.

(b.) Christian Ethics. 3 lectures.

2. *Ethical Seminary.*—1 hour.

Presentation of papers and discussions upon the following subjects:

(a) Modern Social and Sociological Problems.

(b) The Ethical View of Citizenship.

(c) A study of Educational Theories from an Ethical Standpoint.

E. *Modern German Philosophy.*—First half of Senior year, 2 hours.—PRESIDENT SLOCUM.

F. *The Philosophical Movement in England.*—Second half of Senior year, 2 hours.—PRESIDENT SLOCUM.

G. *Advanced Logic.*—Second half-year, 2 hours.—PRESIDENT SLOCUM.

H. *Lotze.*—Second half-year, 2 hours.—PRESIDENT SLOCUM.

I. *Seminary in Social Ethics.*—The Labor Question, Temperance, Pauperism and other social problems considered from an ethical standpoint. Second half-year, 1 hour.

J. *Seminary in Greek Philosophy.*—One half-year, 1 hour.

K. *Evolution of Religious Thought.*—Second half-year, 2 hours.—MR. HASTINGS.

PEDAGOGY.

ASSISTANT PROFESSOR LANCASTER.

A. *History and Philosophy of Education.*—The recent educational developments in Europe and America. Study of educational reformers, school systems and curricula. Lectures, reading and conferences. First half-year, two hours.

B. *School Hygiene and Child Study.*—Hygiene of the senses, fatigue, child and adolescent psychology, problems of the school room and of practical teaching. Lectures, reading and discussion. Second half year, 2 hours.

C. *Original Observations in Psychological and Pedagogical Fields of Study.*—1 hour.

D. *Pedagogical Seminary.*—Reports and discussions of research work.—1 hour.

NOTE—Courses A, B, and C may be taken by correspondence.

GREEK.

PROFESSOR GILE, ASSISTANT PROFESSOR NOYES AND MR. BREHAUT.

A. Homer, selections from the *Odyssey* and *Iliad* in the original and all the poems in translation; Plato, *Apology* and *Crito;* Herodotus, Selections. 3 hours.

B. *Greek Drama.*—Æschylus, *The Septem* and *Prometheus*; Sophocles, *Antigone*; the remainder of Æschylus' and Sophocles' plays in translation; Euripides, *Alcestis* and *Medea.* 3 hours.

C. *Greek History.*—*(a.)* Herodotus; careful study of the period of the Persian Wars. Reading from the dramatists for further illustration of the life of the period; or, *(b.)* Thucydides, the Sicilian Expedition. Parallel readings in Curtius, Grote and other modern historians. Selections from Plutarch's Lives. One half-year, 3 hours.

D. *Greek Philosophy.*—Plato, *Phaedo.* Selections from other dialogues, and from the works of Xenophon. Zeller's *Socrates and the Socratic Schools.* One half-year, 3 hours.

E. *Greek Epic and Lyric Poetry.*—Homer, Hesiod and Pindar. One half-year, 3 hours.

F. *A Course Designed for Teachers.*—Selections from Xenophon; composition; careful grammatical study. One half-year, 3 hrs.

G. *Greek Architecture and Sculpture.*—Tarbell's *History of Greek Art*, lectures and supplementary readings. Second half-year, 2 hours.

LATIN.

PROFESSOR GILE AND MR. BREHAUT.

A. Livy, *Bk. XXII;* Cicero, *De Senectute*, *De Amicitia*; Pliny, *Selected Letters;* Horace, *Odes*. 3 hours.

B. Horace, Selections from the *Epistles* and *Satires;* Tacitus, *Germania* and *Agricola;* Terence, *Phormio;* Plautus, *Captivi;* Cicero, *Selected Letters*. 3 hours.

C. *Drama.*—Selected plays of Plautus and Terence; history and characteristics of the Roman Drama. One half-year, 3 hours.

D. *Catullus and the Elegiac Poets*. One half-year, 3 hours.

E. *Satire.*—History and characteristics of Roman Satire. Selections from Horace, Persius, Petronius, Juvenal. Parallel readings in English Literature. One half-year, 3 hours.

F. *Roman Life.*—Manners, morals, politics and religion under the late Republic and the Empire. Cicero, *Selected Letters;* Petronius, *Cena;* Pliny, *Selected Letters;* Martial, *Selected Epigrams;* reports on special topics. 3 hours.

G. *Vergil.—The Aeneid*, Books VII-XII; the *Bucolics*, and Selections from the *Georgics*. One half-year, 3 hours.

H. *A Course Designed for Teachers.*—Selections from Cæsar and Cicero; composition; careful grammatical study. One half-year, 3 hours.

ENGLISH.

PROFESSOR PARSONS, ASSISTANT PROFESSOR NOYES, MR PATTISON.

B. *Rhetoric and Composition.*—Elementary course, 3 hours.

C. *English Composition.*—Advanced course. First half-year, 3 hours.

D. *American Literature.*—Irving, Cooper, Poe, Bryant, Hawthorne, Longfellow, Emerson, Lowell, Holmes, Whittier. Second half-year, 3 hours.

E. *Early English Literature.*—A rapid survey, from the Anglo-Saxon Conquest to Chaucer. First half-year, 3 hours.

F. *Middle English.*—A study of the development of the English language and literature in the twelfth and thirteenth centuries. Second half-year, 3 hours.

G. *Chaucer and Spenser.*—The principal poems read critically in class. Life and thought of the times. First half-year, 3 hrs.

H. *The English Drama: Through Marlowe.*—Principles and development. First half-year, 3 hours.

I. *The English Drama: Shakespeare.*—The principal plays read rapidly, with special attention to the development of the author's genius. Second half-year, 3 hours.

J. *Shakespeare.*—A critical text study of three dramas of Shakespeare. The class meets once a week for a two-period session. PROFESSOR AHLERS.

K. *Milton.*—A comprehensive study of the poet's personality and work. First half-year, 3 hours.

L. *Beginnings of Romanticism in English Poetry.*—From the Restoration to the French Revolution. First half-year, 3 hours.

M. *Influence of the French Revolution in English Poetry.*—Wordsworth, Coleridge, Shelley and Byron. Second half-year, 3 hours.

N. *Tennyson and Browning.*—First half-year. 3 hours.

O. *English Prose.*—Hooker to Ruskin. A survey of the evolution of modern English Prose and a study of some of the most characteristic English prose writers. Second half-year, 3 hrs.

P. *Old English.*—The beginnings of English Literature. Reading is begun at once and the study is made as literary in character as possible. First half-year, 3 hours.

Q. *Old English.*—Béowulf. Course P. prerequisite. Second half-year, 3 hours.

R. *Lyrics and Sonnets.* Second half-year, 2 hours.

PUBLIC SPEAKING.

MR. RITCHIE.

A. *Declamation.*—One declamation to be prepared and delivered in each half-year. Required of all Freshmen and of all Sophomores who do not take course B.

B. *Oratory.*—(1) An analytical study of the life and works of noted orators; (2) the memorizing and delivery of selections; (3) the study of contemporary orators; (4) the preparation and delivery of two orations.

C. *Forensics.*—The nature of evidence, argumentation, brief drawing, and the delivery of argument. Members of this course will be required to report legal trials. First half-year, 3 hours.

D. *Extempore Speaking.*—Current topics are discussed. Emphasis is laid upon clearness, force and precision of statement. First half-year, 1 hour.

GERMAN LANGUAGE AND LITERATURE.†

PROFESSOR AHLERS.

A. *Elementary Course.*—Joynes-Meissner's *Grammar.* Anderson, *Maerchen;* Storm, *Immensee;* Hauff, *Das kalte Herz; Die Karavane;* Eichendorff, *Aus dem Leben Eines Taugenichts.* 4 hours. PROFESSOR AHLERS and ASSISTANT PROFESSOR SMITH.

B. *Intermediate Course.*—Riehl, *Fluch der Schoenheit;* Jensen, *Die Braune Erica;* Chamisso, *Peter Schlemihl;* Heine, *Harzreise;* Gerstaecker, *Germelshausen;* Lessing, *Minna von Barnhelm;* Schiller, *Wilhelm Tell*, *Lyrics* and *Ballads.* Dictation. Von Jagemann's *Prose Composition and Syntax.* 4 hours.

C. Schiller, *Maria Stuart*, *Die Jungfrau von Orleans*; Goethe, *Egmont;* Sime's *Life of Goethe.* Dictation. First half-year, 2 hours.

D. Lessing, *Emilia Galotti*, *Nathan der Weise;* Rollestone's *Life of Lessing;* Goethe, *Iphigenie.* Dictation. Second half-year, 2 hours.

E. *Outline History of German Literature.*—This course is conducted in English, and is open to all College students, whether they are taking German or not. Kuno Francke's *Social Forces in German Literature* will be used as a text book. This reading will be supplemented by twelve lectures. 1 hour.

F. The *Nibelungenlied* and the Classic Period of the Twelfth Century. *Hartmann von Aue*, *Wolfram von Eschenbach*, *Gottfried von Strassburg.* Lectures and collateral reading. 2 hours.

G. *Middle High German.* — Braune-Paul's *Mittelhochdeutsche Grammatik; Nibelungenlied; Kudrun; Walter von der Vogelweide.* One half-year, 3 hours; a fourth hour at the discretion of the instructor.

H. *Gothic.*—Braune's *Gotische Grammatik;* Heyne's *Ulfilas.* 2 hours.

I. *The Faust Legend and its Development, and Goethe's Faust.*—Synopsis of the Course.

CHAPTER I. Kindred Legends before the 16th Century. *(a.)* Simon Magus. *(b.)* Ahasuerus. *(c.)* Anthemios, Proterius and Theophilus. *(d.)* Cyprianus Antiochus. *(e.)* Tannhaeuser and Don Juan.

†Authors and books designated under German A, B, C and D indicate the scope rather than the actual works read in these courses.

CHAPTER II. The historic Faust; the "Faustbuch" of 1587 and its development; the "Puppenspiele."

CHAPTER III. Faust Dramas before the 18th Century.

(a.) Calderon's El Magico Prodigioso.

(b.) Marlowe's Tragical History of Dr. Faustus.

CHAPTER IV. Faust in the 18th Century.

Lessing's Fragment; Maler Mueller, Klinger, etc.

CHAPTER V. Goethe's Faust.

(a.) The "Urfaust."

(b.) Faust, Part I, 1808.

(c.) Faust, Part II.

This course is conducted entirely in German. The class meets once a week for a 2-hour period.

K. *The Poems of Goethe and Schiller.*—This course is conducted entirely in German. The class meets once a week for one and a half hours.

FRENCH LANGUAGE AND LITERATURE.

ASSISTANT PROFESSOR SMITH.

A. *Elementary Course.*—Edgren's *French Grammar;* Rollin's *Reader;* Halévy, *Un Marriage d'Amour;* Dumas *La Tulipe Noire;* Erckmann-Chatrian, *Madame Thérèse.* Prose composition. Reading at sight. 4 hours.

B. *Intermediate Course.*—Modern fiction and plays. Much ground is covered and especial attention paid to pronunciation. The class is conducted partly in French. Among others, the following books are read: Sand, *La Mare au Diable;* Hugo, *Bug Jargal;* Merimée, *Colomba;* Gréville, *Dosia;* Molière, *Le Medecin Malgré Lui;* Corneille, *Le Cid:* Racine, *Athalie.* Composition based on *Le Siège de Berlin* and *Colomba.* 4 hrs.

C. *Classic Period.* Representative plays of the great classical dramatists are read. Much pronouncing is done; very little translation. Students do outside reading and hand in written reports. A series of lectures on the history of the French theatre is given. This course is conducted largely in French. First half-year, 2 hours.

D. *Nineteenth Century Literature.*—A series of lectures on the development of Romanticism in French Literature; some of the plays read are: Hugo's *Hernani, Ruy Blas;* two comedies

of de Musset; de Bornier's *La Fille de Roland;* Pailleron's *Le Monde ou l'on s'ennuie*; Rostand's *Cyrano de Bergerac.* Second half-year, 2 hours.

E. *Comedies of Molière.*—The more important comedies of Molière will be read by the instructor. Lectures on Molière and his time. Students desiring this course must consult the instructor. Two consecutive hours each week. PROFESSOR AHLERS.

F. *Critical Study of Classic Authors.*—Next year Bossuet and Pascal will be studied. Duval's *Histoire de la Literature Francaise* is used as a basis for a review of literature. Outside reading and written reports in French. Course conducted in French. First half-year, 2 hours.

G. *French Lyric Poetry.*—Study of its development, versification, and forms. Course conducted in French. Second half year, 2 hours.

H. *Old French.*—Constans' *Chrestomathie*, and part of *Aliscans* and *Raoul de Cambrai* will be read. A series of lectures on subjects of old French Literature will be given, and some elementary principles of French phonetics treated. For conditions of admission, see instructor. 2 hours.

SPANISH.

ASSISTANT PROFESSOR SMITH.

A. *Elementary Course.*—Edgren's *Spanish Grammar*, Ramsey's *Reader*, modern prose writers. Students begin reading at once, and as soon as possible pronounce without translating. 3 hours.

B. *Advanced Course.*—Intended for those who have had Spanish A or a similar course. Some of the works of Cervantes, Lope de Vega, Calderon, etc., will be read. Composition and letter writing. 2 hours.

ITALIAN.

ASSISTANT PROFESSOR SMITH.

A. *Elementary Course.*—Similar to Spanish A. Grandgent's Italian grammar. Some of the works read are: Silvio Pellico's *La Mie Prigioni*, Farina's *Il Signor Io*, and Goldoni's *Un Curiosi Accidente.* 3 hours.

ECONOMICS.

Professor Urdahl.

A systematic course in the elements of Political Economy, equired of all students, is followed by elective courses in special subjects. Course A is a prerequisite to any of the electives except F.

A. *Elements of Political Economy.*—Required of Juniors. Text: Ely's *Outlines of Economics.* First half-year, 4 hours.

B. *Charities and Crime.*—The theory and history of charity and reformatory work. Students are encouraged to study the charitable and correctional institutions in the vicinity of their own homes. Text: Warner's *American Charities.* If possible, additional lectures by men who have devoted special attention to some phase of these subjects. Second half-year, 3 hours.

C. *Money and Banking.*—An historical and theoretical course in money and banking, treating especially the production of the metals, the theory of value, the history of prices, bimetallism, paper money, bank notes, etc. Lectures, recitations, reports and discussions. Text: Scott's *Money and Banking.* Alternate with course D. First half-year, 3 hours. (Not given in 1902-03.)

D. *Socialism.*—An historical and critical course in socialism and socialistic theory. Especial attention is paid to the historical basis of socialism, the French Revolution, the idealists, the German scientific socialists, the Christian socialists, the State socialism of to-day, and also to the various attempts at socialistic reforms. Lectures and recitations. Text: Ely's *French and German Socialism.* First half-year, 3 hours.

E. *Colonial Policy.*—The theories of colonization and the economic ideas and institutions underlying the modern expansionist movement; a brief history of the colonial experiments of the great colonizing nations of the world: Spain, Portugal, Holland, France, England and Germany. Lectures supplemented by outside reading. Second half-year, 2 hours. (Not given in 1902-03.)

F. *Economic History.*—The industrial history of England. Open to Sophomores. Introductory to course A, though not prerequisite. Second half-year 2 hours.

G. *Public Finance.*—Taxation, public expenditure, public debts and the budget. Lectures with collateral reading. Text: Adam's *Finance.* Second half-year, 3 hours.

POLITICAL SCIENCE.

Professor Urdahl.

A. *Historical Politics.*—The origin and growth of government from its primitive forms to the establishment of the modern states, the semi-amorphous horde, gentile society, the ancient city, the Athenian Democracy, Greek Confederations, the Roman Republic and Empire, the Germanic folk, the feudal system, the political system of the Church, the Holy Roman Empire, the rise of national states, the development of absolute and constitutional monarchy, the growth of democracy, etc. Lectures, supplemented by recitations and reports. Text: Wilson's *State*. First half-year, 3 hours. (Not given in 1902-03.)

B. *Comparative Politics.*—A study and comparison of the governments of the chief modern states; an exposition of the constitutional law of the United States and England and of their actual political organization. The great problems of federalism and centralization, presidential and responsible ministerial government, colonial government and civil liberty, receive especial consideration. Lectures, recitations and collateral reading. Text: Bryce's *American Commonwealth.* Second half-year, 3 hours. (Not given in 1902-03.)

C. *Elementary Law.*—The leading principles of law and their practical application. Alternate with course A. First half-year, 3 hours.

D. *American Constitutional Law.*—The theory and practical working of the Federal Constitution; recent changes and present tendencies. Reading, lectures and leading cases. Alternate with Course B. Second half-year, 3 hours.

HISTORY.

Professor Urdahl

See also Political Science A *(Historical Politics)* and Economics F *(English Industrial History)*. History amountiug to two hours a week for one year is required of each student.

A. *English History.*—The political history of England from the earliest times to the American Revolution. Recitations and collateral reading, supplemented by lectures on the constitutional and economic development. Text: Gardiner's *Student's History of England.* 2 hours.

B. *American History.*—A general survey, with emphasis on political and economic history. Course A is recommended as a preparation. In special cases the course may be elected for one half-year.

(*a*) First half-year: To the close of the Revolution. 2 hours.

(*b*) Second half-year: From the Revolution to the present time. 3 hours.

C. *The Napoleonic Era and Modern Times.*—The history of Western Europe in the nineteenth century. Second half-year, 2 hours. (Not given in 1902-03.)

D. *Modern European History to the French Revolution.*—Alternate with Course C. Second half-year, 2 hours.

MATHEMATICS.

PROFESSOR CAJORI AND PROFESSOR LOUD.

A (*a*) *Algebra.*—Series; The Binomial Theorem; Logarithms; Undetermined Coefficients; Theory of Equations. 4 hours till Christmas.

A (*b*) *Solid and Spherical Geometry.*—Planes and lines in Space: Polyhedra, the Cylinder, Cone and Sphere; Spherical Triangles. Second half-year, 2 hours.

A (*c*) *Plane Trigonometry.*—The functions of one and two angles; the solution of triangles; simple applications. 4 hours during January. Second half-year, 2 hours.

A (*d*) *Spherical Trigonometry.*—Second half-year, 2 hours.

B (*a*) *Analytical Geometry (Elementary).*—Plane Loci of first and second order. First half-year, 3 hours.

B (*b*) *Analytical Geometry (More Advanced).*—More thorough study of plane loci, some attention being given to modern methods. Second half-year, 3 hours.

C. *Calculus, Differential and Integral.*—First half-year, 3 hours; second half-year, 4 hours.

D. *History and Logic of Mathematics.*—This course is planned especially for those who are fitting themselves to be teachers of Mathematics. One half-year, 2 hours.

E. **Modern Methods in Geometry.*—One half-year, 3 hours.

F. **Theory of Equations.*—One half-year, 3 hours.

G. **Elementary Theory of Functions.*—One half-year, 3 hours.

H. **Elements of Substitution Groups.*—One half-year, 3 hours.

I. *Elementary Surveying.*—Field work and computation. Second half-year, 3 hours.

*Of courses E, F, G and H, only two are given in any one year.

ASTRONOMY.

PROFESSOR LOUD.

A. *Elementary Astronomy.*—The descriptive, rather than the mathematical side of Astronomy, is emphasised. First half-year, 3 hours,

B. *Observations and Computations.*—A continuation of course A. The student is expected to make free use of the telescope. Second half-year, 4 hours.

C. *Mathematical Astronomy.*—Planetary Orbits, etc. 2 hours.

D. *Elementary Meteorology.*—Second half-year, 2 hours.

PHYSICS.

PROFESSOR SHEDD AND MR. ROBERTSON.

ELEMENTARY COURSES.—Prerequisite: One year's *Preparatory Physics* and *Plane Trigonometry.*

A. *General Physics.*—Lectures, Recitations and Laboratory Work. 4 hours.

First half-year: Mechanics of solids, liquids and gases.
Second half-year: Light, Magnetism, Electricity, Sound, Heat.

B. Same as Physics A with additional laboratory work. Required of Sophomores in S. B. course. 5 hours.

ELECTIVE COURSES.—

G. *Problem Work.*—Second half-year, 2 hours. Open to S. B. Freshmen. Prerequisite: one year Preparatory Physics.

C. (*a*) **Theoretical Physics.*—2 hours.
First half-year: Theory of Heat.
Second half-year: Theory of Light.

C. (*b*) **Theoretical Physics.*—2 hours.
First half-year: Theory of Electricity and Magnetism.
Second half-year: Applications to Electromagnetic Machinery, or Elements of Alternating Currents.

D.† *Practical Physics.*—Laboratory Work: Determination of Physical Constants in Mechanics, Heat, Electricity and Magnetism. Problems in Light and Sound. 2 hours.

E. *Lectures on Advanced Physics.*—Prerequisite: The Calculus. 1 hour.

First half-year: Physical Constants and Instruments o Precision.

Second half-year: Magnetism and the Magnetic Circuit.

F. Seminary of Current Literature. 1 hour.

In courses A and B a fee of $1.00 per half-year for each hour's credit will be charged. In Course D no laboratory fee will be charged except in case of material consumed.

*Courses C (a) and C (b) will not be given the same year.

†Course D may be taken only with courses C (a) or C (b).

CHEMISTRY.

PROFESSOR STRIEBY AND MR. GOODALE.

A. *Elementary Chemistry.*—Text-book work (chiefly Inorganic Chemistry) supplemented by lectures and discussions upon the fundamental laws, the application of chemistry to sanitary science, medicine and some of the arts, and also by occasional papers from descriptions in technical books, and by reports of visits to metallurgical and manufacturing establishments. Remsen's *Introduction to the Study of Chemistry.* 4 hours' recitation and 4 hours' laboratory work (counts 4 hours).

B. *Advanced Chemistry.*—This course gives a general knowledge of chemistry. The second term is devoted mainly to Organic Chemistry. The chief theories and laws are studied with reference to the explanation of chemical phenomena. The practical application of chemistry in the arts, and its uses in the sanitary regulation of daily life and work, are brought prominently forward. Abstracts from books on chemical technology and sanitary science and discussions upon recent discoveries and applications of chemistry will occasionally take the place of the usual recitation. The work in the laboratory comprises short courses in Qualitative and Quantitative Analysis and the preparation of inorganic and organic compounds. 4 hours' recitation or lectures and 5 hours of laboratory work.

C. *Qualitative Analysis.*—Prerequisite: Chemistry A or equivalent. Experimental drill in obtaining characteristic reactions of the more common elements, study of empirical formulæ and symbolic expression of reactions, solution of substances, separation of groups of elements, and finally analysis—first of

simple salts and later of complex mixtures. The analytical work is confined almost wholly to inorganic substances but includes certain common organic acids and a few organic bodies of general and medicinal use. First half-year, 6 hours (counts 3); second half-year, 12 hours (counts 6).

D. *Quantitative Analysis.*—Prerequisite, Chemistry C. The laboratory work comprises determinations of single elements by approved methods, gravimetric and volumetric, followed by the analysis of selected salts, ores, slags, mineral water and commercial products. A few rapid or commercial determinations are given as the final work. The lectures treat of the methods of analysis, properties of precipitates, stoichiometry, sampling, reporting and the theory of solutions. The laboratory work occupies 3 consecutive hours 4 days a week (counts 4 hours.) Cairn's *Quantitative Analysis.*

E. *Organic Chemistry.*—Prerequisite, Chemistry A or B. Remsen's *Organic Chemistry.* Lectures and discussions of special subjects and processes. 4 hours' recitation and 4 hours' laboratory work (counts 4 hours).

F. *Theoretical Chemistry.*—Prerequisite, Chemistry B. Text book work with lectures and oral and written discussions. 3 hours.

The fee for every course must be paid in advance. It covers the cost of gas, chemicals and non-returnable supplies, except platinum. Glassware and necessary apparatus (except platinum vessels) are loaned to the student and must be returned in good condition. The fees are as follows:

Preparatory Course	$4 00
Chemistry A	5 00
Chemistry B	6 00
Chemistry C	15 00
Chemistry D	15 00
Chemistry E	15 00

BIOLOGY.

Mr. Shantz.

A. *Elementary Biology.*—Morphology of grasshopper; comparative work on at least two other insects; Crayfish and Cyclops; three Protozoans; Amoeba, Vorticella and Paramecium; Fresh Water Algae; Yeast, Moulds and other Fungi; life of Fungi contrasted with that of Algae; fundamental differences between plants and animals; the Cell, Elementary Embryology,

and Origin of Species; dissection of Sponges, Hydra, Starfish and Clam; Moss and Liverwort or Fern; histology of tissues of flowering plants; dissection of a Vertebrate. Note books and drawings are made. Laboratory fee, $1. 6 hours of laboratory work with occasional lectures (counts 3 hours).

B. *Botany.*—Prerequisite, Biology A. Designed to afford a comprehensive knowledge of the plant kingdom, including the morphology, taxonomy, physiology, ecology and evolution of plants. Laboratory and field work with occasional lectures and recitations. First half-year, non-flowering plants; second half-year, flowering plants. Arthur, Barnes and Coulter's *Plant Dissection*, Coulter's *Plants*. 3 hours.

C. *Zoology.*—A course designed to afford a comprehensive knowledge of the animal kingdom. The needs of the students who expect to take Geology A are kept constantly in mind, and the time is chiefly devoted to systematic zoology. With this is included some work in distributional zoology and phylogeny; and the systematic study is followed by a brief consideration of the general principles of zoology. Recitations and lectures. Packard's *Zoology* and Hertwig's *Principles*. Second half-year, 3 hours.

D. *Comparative Anatomy of Invertebrates.*—Prerequisite, Course C. Mainly laboratory work with references. First half-year, 3 hours.

E. *Comparative Anatomy of Vertebrates.*—Prerequisite, Course C. Laboratory work with occasional quizzes. References to standard authors. Second half-year, 3 hours.

F. **Histology.*—Preparation of tissues for microscopical slides; examination and drawing of histological mounts. Laboratory guide, Stohr, Stirling or Piersol. Laboratory fee, $2.50. First half-year, 6 hours (counts 3 hours).

G. **Physiology.*—Prerequisites, elementary courses in Biology, Chemistry and Physics. Thornton's Human Physiology. References to Foster, Flint, Martin. The library of the El Paso County Medical Association is available. Laboratory fee to cover actual cost of material. Second half-year, 2 or 3 laboratory hours, 2 recitation hours (counts 3 hours.)

H. **Embryology.*—Prerequisites, Biology or Zoology; Comparative Anatomy if possible. Preparation of mounts; drawing from slides; comparative work on frog and other animals. Foster and Balfour's Elementary Embryology of the Chick. Labora-

tory fee, $2.50. Second half-year, 5 laboratory hours, 1 lecture or recitation hour (counts 3 hours).

I. **Bacteriology*.—Laboratory practice in preparation of culture media aud technique of obtaining pure cultures from different sources. Laboratory guide and Strenberg's Manual of Bacteriology. Laboratory fee to cover actual cost of material. First half year, 2 or 3 hours.

*Intended primarily for students expecting to study medicine.

GEOLOGY.

PROFESSOR CRAGIN.

The study of Geology is peculiarly attractive in the vicinity of Colorado Springs. Few localities present strata of so many geological ages or so varied an assemblage of rock and mineral species. Fossils of systems as early as the Cambrian and as late as the Quaternary occur within a radius of six miles from the College. Veins dikes, faults, caves, flood-plains, river-erosion, sand carving and the results of organic and glacial action are all well illustrated near at hand. To this wealth of geological illustration the College Museum and a collection of lantern slides add many specimens and views.

A. *Geology*.—Prerequisite for the first half-year, Elementary Chemistry; and for the second, Biology or Zoology. Recitations, special exercises and excursions to points of geological interest. In the first half-year Dynamical, Structural and Physiographical Geology are studied; in the second, Historical Geology. Text Book: Scott's *Introduction to Geology*, supplemented by Le Conte, Dana, Geikie, Prestwich, etc. Students in Structural Zoology or an allied Science, who are looking forward to Geology as one of their future studies and wish to make the best preparation for it, should give as much attention as possible to the comparative or systematic side of their subject. By electing Mineralogy before Geology, a material advantage may be secured. 4 hours.

B. *Mineralogy*.—Advised for students who intend to elect any of the other branches of Geology among inorganic lines. This course is planned first of all to be practical. The *economic* or *ore classification* of minerals is used and the time is devoted chiefly to laboratory work in Descriptive and Determinative Mineralogy. Only enough Crystallography is given to enable the student to understand the general relations of crystals and apply the terms of form and cleavage used in determinative

tables. Text-books: Moses and Parsons' *Mineralogy, Crystallography and Blowpipe Analysis* and Crosby's *Tables for the Determination of common Minerals*. Reference books: Dana's *Text-book of Mineralogy*, Cornwall's *Blowpipe Analysis*, Brush and Penfield's *Determinative Mineralogy*, etc. There is a laboratory fee of two dollars, covering use of gas, minerals and certain other supplies. Uniform individual working outfits are furnished at cost. First half-year, 4 hrs.

C. *Advanced Mineralogy*.—Prerequisite, Geology B. A laboratory course continuing course B. Text and Reference books: those of *Geology B* and Dana's *System of Mineralogy*, *Supplement*, etc. Laboratory fee, one dollar. Second half-year, 2 hours.

D. *Crystallography*.—Recitations and laboratory work. Text-book: Williams' *Elements of Crystallography*, supplemented by the crystallographic part of Brush and Penfield's *Determinative Mineralogy*. First half-year, 2 hours.

E. *Economic Geology*.—Prerequisite, Geology A (Mineralogy is desirable.) Recitations, examination of useful minerals and rocks, and of products derived from them; visits to geological localities of especial economic interest, and to industries based on geological resources; preparation of papers and discussions upon assigned topics. Text-book: Tarr's *Economic Geology of the United States*. First half-year, 4 hours.

F. *Invertebrate Palæontology*.—Prerequisite, Zoology. Recitations and laboratory study of fossils of principal groups, preceded in part by a study of recent forms of the same or allied groups. Zittel's *Text-book of Palæontology*, *Volume I*. The student is guided in the use of other important literature on the subject. Second half-year, 3 hours.

G. *Vertebrate Palæontology*.—Prerequisite, Zoology. Recitations and laboratory studies in the Comparative Osteology, Taxonomy and Evolution of the Vertebrata. The student makes use of the general works and monographs of Reynolds, Zittel, Huxley, Cuvier, Leidy, Cope, Marsh, Osborn, Scott, etc. Second half-year, 3 hours.

H. *Petrography*.—Prerequisite: Mineralogy, Crystallography and Physics. An elementary course in the Microphysiography of Rock-Components. Recitations and laboratory work. Luquer's *Minerals in Rock Sections*. Second half-year, 3 hrs.

BIBLE STUDY.

Professor Parsons.

Open as an elective to Juniors and Seniors. Freshmen and Sophomores having time to take the work will be allowed advanced credit on Junior and Senior electives. Academy students may enter the class, but will receive no credits. 1 hour a week.

The following courses are offered in successive years:

I. Introduction to the Books of the New Testament.
II. The Life of Christ (2 years.)
III. Old Testament Literature.
IV. The Life of Paul.

In 1902-'03 the class will study Course III.

PHYSICAL TRAINING.

The peculiar climate of Colorado Springs and its charming surroundings make outdoor sports possible and attractive throughout the year. Tennis is frequently played at Christmas and New Years, and baseball practice is begun as soon as the football season is over. A gymnasium equipped with the necessary appliances for the most approved methods of physical exercise, heated by steam and furnished with shower baths, lockers, etc., serves for indoor exercises.

Physical training is required of every young woman unless excused by the College physician. Upon entrance each is given a thorough physical examination. From the data recorded an anthropometric chart is plotted, showing defects in comparison with the normal standard, and prescribing special corrective exercises where needed. From November until May class drills are held, which include military tactics, free body building, the use of apparatus and Swedish work. Tennis, battle ball and basket ball are played, the last according to the rules adopted by the conference on Physical Training held in Springfield, Massachusetts, June, 1899, and now used by all the leading Eastern colleges. The physical instructor is Miss Isabella Strang.

Football, baseball, tennis and track athletics are consolidated in the Colorado College Athletic Association. The interests of the Association are controlled by a board, consisting of Professors Ahlers, Cajori and Smith, Messrs. W. R. Armstrong, W. P. Bonbright, C. H. Mallon and W. K. Jewett—and nine representatives from College and Academy, including the Captains and Coaches of the teams. Mr. W. R. Armstrong is president of the Board.

This Board advises the students in all sports, audits the

accounts of managers, and raises and authorizes the expenditure of money for the various athletic sports.

In 1898 the Athletic Association built, at large expense, a fine athletic park. For this purpose the natural amphitheatre in the rear of the College buildings, facing the mountains, was used. About five acres of ground were leveled and enclosed by an eight-foot fence, and a fine grand stand with a seating capacity of 600 was erected. In 1900 a grand stand, seating 800, was given by Mr. Jas. F. Burns. For adaptation to its purposes, there is no more complete and satisfactory park in the West; for situation and beauty of its surroundings it is probably unrivalled in the world.

Within fifteen minutes' walk of the College is a fine golf club of which College students may become members. The delightful open winters of Colorado Springs make it possible to enjoy this excellent sport throughout the year.

THE MASTER'S DEGREE.

The Master's degree is conferred subject to the following conditions:

(1) The applicant must have received the Bachelor's degree from some reputable College or University.

(2) If the applicant becomes a resident student of Colorado College, he must pursue a minimum course of six hours per week for one year, two-thirds of the work being in one department. In addition he must present a satisfactory thesis on a subject approved by the Faculty, such thesis to represent one-half of the requirement for the degree.

(3) In case of non-residence the applicant must complete a minimum requirement equivalent to ten hours of lectures per week for one year, of which the equivalent of seven hours must be in one department, and at least two academic years must elapse before the degree is conferred. A thesis is required as in the case of the resident student.

The fees are $20 a year for tuition, $5 for the diploma, and $1 to bind the thesis. The thesis must be typewritten on paper of a prescribed size and a copy of it must be deposited with the College librarian.

Applications for the Master's degree should be sent to the Chairman of the Faculty Committee on post-graduate degrees (see p. 14) who will furnish information about courses.

HONORS.

Scholarship Honors of two grades are awarded at Commencement for excellence in the work of the year. The Honor list for 1900-01 was as follows:—

HIGH HONORS.

Pearl Irene Beard, '03.
Ella Sabin Fillius, '03.
Francis Martin Loud, '04.
Henry Lacey McClintock, '03.
Hugh McLean, '01.
Osie Frances Smith, '02.
Ella Louise Warner, '04.

HONORS.

Cora Edith Draper, '02.
Ella Lorna Graber, '02.
Albert Chain Hardy, '03.
Leonard Rose Ingersoll, '02.
Mabel Jencks, '04.
Benjamin F. Moores, '02.
Lois V. Stoddard, '02.
Sarah Foss Wolverton, '04.

PERKINS SCHOLARS.

Pearl Irene Beard, '03.
Henry Lacey McClintock, '03.

HAWLEY SCHOLARS.

Lucile Allderdice, '03.
Alwina Beyer, '03.
Florence Lillian Leidigh, '02.
Clare McCoy, '03.
Ethel Smeigh, '03.
Osie Frances Smith, '02.

HASTINGS PRIZES.

1. Hugh McLean, '01.
2. Bernard Lee Rice, '01.

THE CUTLER ACADEMY.

Cutler Academy, named after the late Henry Cutler, of Massachusetts, a generous and steadfast friend of Colorado College, provides a thorough preparation for any college in the United States. While the preparatory training is the principal aim, the plan of study is arranged to meet the requirements of students who do not propose entering upon College work. The course embraces four years, and the teaching is conducted by instructors most of whom are also engaged in the work of the College.

A student in Cutler Academy preparing for some other college than Colorado College, where the requirements for admission differ in some particulars, can by timely application to the instructors secure such modification of his course as will meet the necessities of his case.

Students enjoy the privileges of the Coburn Library, the Department of Fine Arts and the Conservatory of Music, on the same terms as students of the College.

Two excellent literary societies are maintained, one by the girls, the other by the boys.

Correspondence concerning the Cutler Academy should be addressed to the Principal.

THE CUTLER ACADEMY—FACULTY.

WILLIAM FREDERICK SLOCUM
President.

M. CLEMENT GILE, Principal
Latin and Greek.

LOUIS A. E. AHLERS
French and German.

ERNEST BREHAUT
Latin.

FLORIAN CAJORI
Mathematics.

ANNA PEARL COOPER
English and History.

EDNA JACQUES
Latin.

FRANK H. LOUD
Mathematics.

HANNAH TAYLOR MUIR
Medical Adviser.

ATHERTON NOYES
English and Greek.

EDWARD S. PARSONS
English.

ANNA PARRY
Mathematics.

RALPH N. ROBERTSON
Physics.

HOMER LE ROY SHANTZ
Physiology and Botany.

JOHN C. SHEDD
Physics.

HUGH A. SMITH
French and German

WILLIAM STRIEBY
Chemistry.

JAY LINCOLN WAID
Drawing.

ADMISSION.

Candidates for admission to the Cutler Academy are expected to have finished the eighth grammar grade in the public schools, or to have covered the equivalent of the following work:

Arithmetic—Franklin or Wentworth.

English—Reed and Kellogg's Higher Lessons.

History—Montgomery's United States History.

Geography—Any school Geography.

Applicants for admission who have, within six months, been students in the Colorado Springs High School, must present certificates from the High School showing completion of the work of the grade preparatory to the Academy class which they wish to enter. The High School will, upon payment of a small fee, provide special examinations for this purpose, if the regular examinations were not passed. The Academy will not examine such applicants, except upon subjects which were not included in their High School course.

Candidates for admission in 1902 should present themselves at Palmer Hall on Tuesday, June 10th, or Tuesday, September 9th at 9 A. M. Each applicant must bring a certificate of good moral character and a full written statement of studies pursued elsewhere. Any student whose influence is felt to be injurious to good scholarship or good morals will not be permitted to remain in the Academy.

COURSES OF INSTRUCTION.

CLASSICAL COURSE.

FIRST YEAR.

		HOURS PER WEEK
FIRST HALF	*Latin:* Comstock's First Latin Book; Roman History	6
	Algebra: Through Fractions	6
	English: Review of Grammar (Carpenter); study of narration; composition work	4
	Required Supplementary Readings, see p 58	
	History: English	2
		18
SECOND HALF	*Latin:* First Latin Book completed; Allen and Greenough's Latin Grammar; Cæsar; reading at sight; Roman History	6
	Algebra: Through Radicals and easy Quadratic Equations	6
	English: Gayley's Classic Myths; study of description; composition work	4
	Required Supplementary Readings, see p. 58	
	History: English	2
		18

SECOND YEAR.

FIRST HALF	*Latin:* Allen and Greenough's Latin Grammar; Cæsar; prose composition; reading at sight	4
	Greek: Goodwin's Grammar; White's Beginner's Greek Book; Greek Reader	5
	English: Genung's Outlines of Rhetoric; choice of words, phraseology, the sentence; constant writing	3
	Required Supplementary Readings, see p. 58	
	Geometry	3
	German	4
		19

		HOURS PER WEEK
SECOND HALF	*Latin:* Grammar; Cæsar; Ovid, Stories from the Metamorphoses; reading at sight; prose composition	4
	Greek: Grammar; Greek Reader; Xenophon's Anabasis; reading at sight	5
	English: Genung concluded; the sentence continued; the paragraph; the whole composition; writing by means of outlines; methods of transition	3
	Required Supplementary Readings, see p. 58	
	Geometry	3
	German	4
		19

THIRD YEAR.

FIRST HALF	*Latin:* Grammar; Vergil, Æneid, Books I-III; reading at sight; prose composition; Greek History	5
	Greek: Xenophon's Anabasis, 2 books; reading at sight; written translations; composition (Jones); Greek History	5
	Algebra and Plane Geometry	4
	English: George Eliot's Silas Marner; Scott's Ivanhoe; Goldsmith's Vicar of Wakefield; Shakespeare's Merchant of Venice and Julius Caesar	3
	Required Supplementary Readings, see p. 58	
		17

SECOND HALF	*Latin:* Grammar; Vergil, Æneid, Books IV-VI, The Bucolics; reading at sight; prose composition; Greek History	5
	Greek: Xenophon's Anabasis, 2 books or an equivalent; reading at sight; composition; Greek History	5
	Solid Geometry	4
	English: Shakespeare's Macbeth; Coleridge's Ancient Mariner; Addison's Sir Roger de Coverley Papers; Tennyson's Princess	3
	Required Supplementary Readings, see p. 58	
		17

FOURTH YEAR.

		HOURS PER WEEK
FIRST HALF	*Latin*: Grammar; Cicero, Four orations against Catiline; reading at sight; prose composition	5
	Greek: Homer, Iliad, Books I-III; composition (Jones); reading at sight	5
	Mathematics: Review and general exercises	3
	English: Burke's Oration on Conciliation; Selections from Spenser's Faerie Queen, Book I; Milton's L'Allegro, Il Penseroso, Comus and Lycidas; Macaulay's Essays on Milton and Addison	2
	Required Supplementary Readings, see p. 58	
	German, French, Physics, Chemistry, or Freshmen Mathematics	4
		19
SECOND HALF	*Latin*: Grammar; Cicero, Orations for Archias, for Marcellus, and for the Manilian Law; reading at sight; prose composition	5
	Greek: Homer, Iliad, Books IV-VI, and Odyssey, Books I-III; written translations; composition	5
	Mathematics: Review and general exercises	3
	English: Chaucer's Prologue; Tennyson's Princess; Burns' Poems; Carlyle's Essay on Burns	2
	Required Supplementary Readings, see p. 58	
	German, French, Physics, Chemistry, or Freshman Mathematics (continued)	4
		19

SCIENTIFIC COURSE.

FIRST YEAR.

FIRST HALF	*Latin:* As in Classical Course, or *German* 4 and *Free Hand Drawing* (4) 2...	6
	Algebra: As in Classical Course	6
	English: As in Classical Course	4
	History: English	2
		18

		HOURS PER WEEK
SECOND HALF	*Latin:* First half-year continued, or *German and Drawing*	6
	Algebra	6
	English: As in Classical Course	4
	History: English	2
		18

SECOND YEAR.

FIRST HALF	*Latin*:* As in Classical Course; *French*: Alternative with Latin	4
	Physiology: Martin's Human Body	4
	German†	1
	English: As in Classical Course	3
	Geometry	3
	General History	3
		17 or 18
SECOND HALF	*Latin* or *French*	4
	German: As in first half-year	1
	English: As in Classical Course	3
	Geometry	3
	History: As in first half-year	3
	Botany	4
	Drawing (2)	1
		18 or 19

THIRD YEAR.

FIRST HALF	*Latin:* As in classical Course, or *French*‖ 1 and *German* 4	5
	Chemistry: Williams' Elements of Chemistry; Laboratory Practice	4
	Algebra and Plane Geometry, as in Classical Course	4
	English: As in Classical Course	3
	Free Hand or Mechanical Drawing	2
		18

*Latin, if elected, must be taken at least two years.
†For those who elected German in first year.
‖ For those who elected French in the second year.

		HOURS PER WEEK
SECOND HALF	*Latin* or *German* and *French*‖: First half-year continued	5
	Chemistry: First half-year continued	4
	Solid Geometry: As in Classical Course	4
	English: As in Classical Course	3
	Drawing: First half-year continued	2
		18

FOURTH YEAR.

FIRST HALF	*Latin* or *French* 4, (or *German*) and *Mechanical* or *Free Hand Drawing* (2) 1	5
	Physics: Text book and laboratory practice	4
	Review Mathematics: As in Classical Course	3
	Algebra and *Plane Trigonometry:* (Freshman Mathematics)	4
	or *Chemistry B* (see p. 41)	4
	English: As in Classical Course	2
		18

SECOND HALF	*Latin* or *French* (or *German*) and *Drawing*: First half-year's work continued	5
	Physics: First half-year continued	4
	Review Mathematics: As in Classical Course	3
	Mathematics: Plane Trigonometry; Solid Geometry	4
	or *Chemistry B*, first half-year continued	4
	English: As in Classical Course	2
		18

HONORS.

Scholarship Honors of two grades are awarded at Commencement for excellence in the work of the year. The Honor list foı 1900-01 was as follows:

HIGH HONORS.

MARJORIE TRUE GREGG, '01.

INEZ ANNA RIDGWAY, '01.

FLORENCE KELLOGG ROOT, '02.

SAMUEL BRAYTON FAIRBANK,' 04.

HONORS.

ELIZABETH JEANNETTE LOCKHART, '02.

JOSEPHINE MINER, '04.

LULU N. DRAPER, '04.

REQUIRED SUPPLEMENTARY READINGS IN ENGLISH.

First Academy: Macaulay's Lays of Ancient Rome; Hawthorne's Wonder Book and Tanglewood Tales; Æsop's Fables; Gulliver's Travels; Arabian Nights; Scott's Ivanhoe; Dickens' Oliver Twist; Hughes' Tom Brown at Rugby; Kipling's Jungle Books; Kingsley's Water Babies; Tennyson's Enoch Arden; Lamb's Tales from Shakespeare.

Second Academy: St. Pierre's Paul and Virginia; Lanier's The Boy's King Arthur; Longfellow's Tales of a Wayside Inn; Irving's Tales of a Traveler; Dickens' Christmas Carol; Lanier's The Boy's Froissart; Bryant's Iliad; Scott's Talisman; Kingsley's Westward Ho; Hawthorne's Twice Told Tales; Brown's Rab and His Friends.

Third Academy: Scott's Marmion and the Lady of the Lake; Shakespeare's Twelfth Night and Richard II; Irving's Conquest of Granada; Scott's Quentin Durward and Peveril of the Peak; Bulwer's The Last Days of Pompeii; Plutarch's Lives of Themistocles and Alcibiades: Fiske's War of Independence; Thackeray's Newcomes.

Fourth Academy: Palmer's Odyssey (or Leaf's Iliad); Matthew Arnold's Sohrab and Rustum; Scott's Guy Mannering and The Heart of Midlothian; Blackmore's Lorna Doone: Curtis' Prue and I; Saintine's Picciola; Jane Austen's Pride and Prejudice; Fiske's Critical Period of American History.

CONSERVATORY OF MUSIC.

FACULTY.

RUBIN GOLDMARK.
Director and Professor of Harmony, Counterpoint and Composition.

GEORGE CRAMPTON.
Acting Director and Instructor in Voice Culture, Sight Reading, and Ear Training.

CLARENCE WILBER BOWERS.
Instructor in Piano-forte, Organ, Harmony and Counterpoint.

MRS. ROBERT BRISCOE.
Instructor in Violin.

MRS. GEORGE CRAMPTON.
Assistant Vocal Instructor.

MRS. MAUD S. FAUST.
Instructor in Piano-forte.

OMA FIELDS.
Instructor in Piano-forte.

The Conservatory of Music was established in 1894, and offers an education in all the higher musical branches. The Perkins Fine Arts Hall, lately erected, affords exceptional facilities for the work of this department. Instruction is now given to nearly 100 students.

The Conservatory is modeled after the best European and Eastern Institutions. Its purpose is, while enabling the student to acquire technical proficiency in any desired branch of the art, to mould him into a musician. This can be accomplished only by a con-

servatory where the students of the various departments are drawn closely together in the exercise of their art. Co-ordinate branches are opened to view, a musical atmosphere is created, the horizon is widened, and the student unconsciously absorbs much that is of inestimable value.

The study of Musical Theory is of the utmost importance to every musician. The more he knows of Harmony, Counterpoint, Composition and the general History of Music, the more will his musical culture be increased, his artistic view be broadened, his appreciation of the classic works of the great masters be deepened, and the more will he be able to impart to others the fundamental principles whereon musical progress is based. The conservatory provides for a course of illustrated lectures on general musical subjects and a series of recitals and concerts, furnishing the student an opportunity of viewing in practice what he has learned in theory.

Since languages, æsthetics and belles lettres are of importance to the serious musician, it is especially fortunate that the Conservatory stands in such intimate relations to the College, and that the pupils may avail themselves of its varied privileges.

For those students of the Conservatory who desire to study in the College, the fee for one course is ten dollars a term or twenty dollars a year. For two or more courses, the regular tuition of seventeen dollars and a half a term, or thirty-five dollars a year is charged.

COURSES OF STUDY.

The following courses of study are offered: Piano, violin, organ, voice culture, harmony, counterpoint and composition. Further instruction will be provided as soon as a sufficient demand is evident.

The student is offered a choice between class and private instruction. Attention is called to the marked advantages that result from the former, where an hour is divided among three pupils and all remain in the class the full time; in this manner they learn as much by listening to their classmates as when receiving instruction themselves. For those who intend to adopt teaching as a vocation, it is most important to profit by the mistakes of others. The system of class instruction is in vogue in all European and in most of the Eastern conservatories.

I. Piano Forte.—The instruction is adapted to the individual needs of each pupil.

The course is divided into six grades, *First and Second Elementary*, *First and Second Intermediate*, *First and Second Advanced*.

In the *First Elementary* grade the pupil is taught to read music, to play major and minor scales and simple arpeggios. The works used are Mathew's graded studies, Books I and II, and New England Conservatory Method, Parts I and II.

Second Elementary:—Scales and Arpeggios (these are continued in various forms throughout all the grades.) Etudes: Loeschhorn, op. 65, Heller op. 47, Czerny op. 139, and School of Velocity, Books 1 and 2. Bach, Little Preludes and Fugues. Sonatinas: Clementi, Kuhlau Dussek and easy selected pieces by standard composers.

First Intermediate:—Etudes: Loeschhorn op. 65 and 66, Heller op. 45, 46, 81. Czerny, School of Velocity Books 3 and 4. Six octave studies. Sonatas by Haydn and Mozart, the easier sonatas by Beethoven, Mendelssohn Songs without words, and selected pieces by Hummel, Moscheles, Jensen, Merkel and Rheinberger.

Second Intermediate:—Czerny etudes op. 740 and forty daily studies, Kramer-Bülow 50 etudes, Bach, two and three-part inventions, Arthur Foote op. 21. Loew octave studies, Beethoven sonatas, Schubert Impromptus and Momens Musicaux, Handel Variations, and works of moderate difficulty by Mendelssohn, Schumann, Weber, Rubinstein, and Rheinberger.

First Advanced:—Clementi, Gradus ad Parnassum; Taussig, daily exercises: Moscheles op. 70; Kullack, octave studies; Bach, well-tempered Clavichord; Mendelssohn, preludes and studies; selections from the works of Beethoven, Schumann, Chopin, Raff, Rubinstein, Moskowsky, Grieg, and MacDowell.

Second Advanced:—Chopin op. 10 and 25, Henselt op. 2 and 5, Rubinstein op. 23, Liszt Paganini Studies and Etudes Transcendentales, Bach-Liszt Fugues and other transcriptions. Concertos by Beethoven, Schumann, Chopin, St. Saens, Grieg, as well as those works which constitute the repertory of the modern pianist.

Attention is devoted throughout the course to sight-reading, accompanying and ensemble playing.

The time necessary to complete each grade will depend on the ability of the pupil and on the number of hours of daily practice.

Upon the completion of each grade a certificate will be issued by the director.

At the close of the *First Advanced* grade the student may receive a Teacher's Certificate.

II. Voice Culture and Singing.—Especial attention is given to a correct management of the breath, the posing and preservation of the voice, artistic phrasing, and the development of a refined musical taste.

The course is divided into three grades: *Elementary*, *Intermediate*, and *Advanced.*

Elementary:—Breathing Exercises, Simple Tones, Attack, Blending of Registers, Nava's Elements of Vocalisation, Easy Songs.

Intermediate:—Intervals, Major and Minor Arpeggios, Major and Minor scales, Phrasing, Nava, Book II, Concone and Nava Solfeggi, Songs.

Advanced:—Further Development of the Voice, Scales, Embellishments. Special attention will be given to Ear Training in all the grades. German Lieder, Arias from Oratorio and Opera.

III. Organ.—It is required of pupils admitted to this course that they shall have first studied the piano for at least one year.

The *Elementary* grade is devoted to exercises in pedal playing, first studies in pedal obligato, hymn-tune playing, and elementary registration.

The *Intermediate* grade embraces an extended study of registration through the medium of pieces especially adapted for use as preludes and postludes in church service, including studies and pieces of the polyphonic type as represented by Bach and Rink, and the practice of quartette and chorus accompaniment.

The *Advanced* grade is devoted to the study of organ solo, including Bach's Preludes and Fugues, works in sonata form by Mendelssohn and others, modern works in free form, and lessons in improvisation and transposition.

IV. HARMONY.—This course includes the study of the various chords, their structure, relations, and progressions, the working out of figured basses, the harmonization of choral melodies, and modulation. All the principles are taken down by the students from demonstrations in the class-room. Richter's Harmony is used as a work of reference.

V. COUNTERPOINT.—This subject can be taken only by those who have satisfactorily completed the study of Harmony.

Simple and double counterpoint for two, three and four voices, imitations, canons, three and four part vocal and instrumental fugues. No text-book is used.

VI. COMPOSITION.—This subject is divided into two courses of one year each. A thorough knowledge of Harmony and Counterpoint is necessary for admission.

Part I. The construction of phrases and periods; the simpler instrumental forms; the scherzo, rondo, adagio, variations, and the sonata form. The student does practical work in all these departments of Composition; the work is criticised in detail in the class-room. Especial attention is devoted to the analysis of the classic master works.

Part II. Instrumentation; the nature and characteristics of all the orchestral instruments, and their application in symphonic writing; the larger vocal and instrumental forms; the string quartette and various branches of chamber music; continuation of analysis and reading from score.

Sight-Reading and Ear-Training Classes.—These classes are organized each year, and are free to all students of the Conservatory.

Concerts, Recitals, etc.—All concerts and recitals given under the auspices of the Conservatory are free to students of music.

The following have been given this year:

An Opening Recital by the Musical Faculty.

Two Song Recitals by Mr. Crampton.

A Modern Song Recital by Mr. Crampton, assisted by Mr. Bowers and the Girls' Glee Club.

Two Organ Recitals by Mr. Bowers.

Ensemble Class:—A class in eight-handed playing on two pianos is conducted by Mr. Bowers.

History of Music:—Lectures on the History and Theory of Music will be given before the Conservatory next year.

Student Recitals:—A number of Recitals are given during the year, thus affording an opportunity for public appearance.

The Colorado Springs Musical Club, which holds bi-weekly meetings during the year, has made a special low membership rate to students of the Conservatory.

Artists' Concerts:—The Colorado Springs Musical Club gives an annual course of concerts by famous artists, for which they have offered a reduced rate to students of the music department. Among the artists who have appeared this year are Katherine Fisk and Joseph Hoffmann. Arrangements have been made to secure the Kneisel Quartette.

MUSIC FESTIVAL.

This year for the first time a two days' Music Festival was held under the direction of Mr. Crampton. The Chicago Symphony Orchestra was engaged for two concerts. The following programmes were rendered: Tschaikowsky's Pathetique Symphony, Dvorak's Slavonic Dances, Wagner's Overture to Tannhauser, Ride of the Valkyries, Waldweben (Siegfried); Hiawatha's Wedding Feast (Coleridge-Taylor) by Chorus and Orchestra, Beethoven's Pastoral Symphony, Saint-Saens Concerto for Cello and Orchestra. In addition the Orchestra gave a free students' concert. It is hoped to make the festival an annual event.

SPECIAL ADVANTAGES.

In the Perkins Fine Arts Hall are ten practice rooms for the use of students of the Conservatory residing on the campus. A nominal fee is charged for the rent of the pianos,

The healthful surroundings and unexcelled climate of Colorado Springs are especial advantages to the music student. In many cases the study of music is a severe tax on the strength of the conscientious pupil. Here he can pursue musical and other studies, while at the same time gaining health and strength.

The student has access to the courses in Physical training, in the college, free of cost.

The College Library is open to students of music on the same terms as to students of all other departments—three dollars a year.

TUITION.

By the term of four months (coinciding with the College half-year) payable in advance; two lessons a week.

CLASS LESSONS, ONE HOUR LONG.

Piano-forte, violin, voice, each	$25 00
Harmony	12 00
Counterpoint	18 00
Composition	22 50

PRIVATE HALF-HOUR LESSONS.

Piano-forte, violin, voice, organ, each	$35 00

There is an entrance fee of $2, omitted in case of college students taking a regular course of study. Diplomas will be awarded on examination to students who successfully complete a one, two or three-year's course of study. An examination fee of $3, $4 or $5 respectively will be charged.

OTHER EXPENSES.

Library Fee (if Library is used), by the year	$3 00
Rent of Piano, one hour each day, by the term	3 00
Rent of Piano, two hours each day, by the term	5 00
Rent of Piano, each additional hour, by the term	2 00
Rent of two-manual organ 1 hr. each day, by the term	10 00

Students will be accepted only on payment of a full term's tuition. No deduction will be made for absence from lessons, except on account of prolonged illness.

Students of music may secure rooms in the College dormitories.

DEPARTMENT OF ART AND DESIGN.

LOUIS J. SOUTTER.
Director and Instructor in Drawing and Painting.

JAY LINCOLN WAID.
Instructor in Applied Design and Mechanical Drawing.

Instruction is given in Academic drawing, painting, modeling, artistic anatomy, historic ornament, decorative designing, illustration, mechanical drawing and perspective. Emphasis is placed upon thoroughness and maintenance of artistic ideals, and students are encouraged to strike out along original lines. Those without previous training devote most of their time to drawing in pencil and charcoal from the cast and still life, but from the first some work is done with colors. Advanced students draw and paint from life in charcoal, oil, water color and pastel. Every week a subject to be illustrated by an original composition is given and the pupil executes it in any medium he desires. Students model in composite clay, first from simple objects, afterwards from the cast and life. Studio talks by Mr. Soutter, Mr. Waid, and others are be given every month. An important feature is the sketch class, conducted exclusively by the students. Special classes for children are held twice a week.

A course has been arranged which is designed to prepare thoroughly for responsible positions in engraving houses and on newspapers and magazines. Instruction is given in pen drawing, gouache, historic ornament, original designing, and engraving processes, particularly those used in newspaper and magazine work. The students are taught how various effects are obtained and how to estimate the cost of plates and printing.

The opening of Perkins Fine Arts Hall marked an important advance in the work of the department. In it are the exhibition rooms and the studios which are open from 9:30 a. m. to 5 p. m. Many paintings have recently been added to the already fine collection in the exhibition hall. During the past year a loan

exhibition of seventy-five modern paintings was held. The greater number of these were furnished by residents of Colorado Springs. Among the paintings were fine examples of the modern German, Dutch, Italian, French, Spanish, American and English Schools. Several exhibitions of students' work are held during each year. The drawings receiving honorable mention on these occasions are retained for the annual exhibition.

All materials except easels and drawing boards are furnished by the students. Lockers are provided.

SCHEDULE.

	9:30 A. M.	2:00 P. M.
Monday	Studies of Expression: Head Life.	History of Art. Drawing for Illustration.
Tuesday	Studies of Expression: Head Life.	Artistic Anatomy. Drawing for Illustration.
Wednesday	Still Life.	Children's Class—2:30-4:00. Perspective (first half-year.) Lettering (part of second half-year.)
Thursday	Character Sketching: Costumed Model. (Time Sketching once a month.)	Historic Ornament and Designing.
Friday	The Cast. Mechanical Drawing.	Modeling, Historic Ornament and Designing.
Saturday	The Cast. Children's Class. Mechanical Drawing.	

TUITION.

One year, five days a week in studio	$100 00
One half-year, five days a week in studio	60 00
One half-year, two days a week in studio	50 00
One half-year, two days a week	30 00
Single lessons, (in class)	1 50
Single lessons (private.)	2 00

LOCATION.

Colorado College is fortunate in its environment. Colorado Springs, the county seat of El Paso County, and the third largest municipality of the commonwealth, is remarkable for its history and character, and is admirably adapted to be the seat of a college. Founded in 1871, under the direction of men of shrewd foresight and broad views, it has maintained from the beginning high standards of morality and culture. Saloons and the attendant destructive influences are absent. Radiating railroad systems and the recent development of neighboring gold fields have fostered its wealth. Many visitors are attracted hither, both pleasure seekers and health seekers, but the invalids are so far outnumbered that the place has none of the depressing influence so often observed at noted health resorts. The lover of nature might seek far before finding a spot more favored. The mountains are close at hand, their serrated outline occupying about one third of the horizon. In the center of the range, less than a dozen miles away, stands Pike's Peak. Its summit is reached by a cog railway, as well as by bridle-paths and a carriage road. About its base are numerous canons, and in one of these, around a celebrated group of mineral springs, has grown up the city of Manitou. The climate of Colorado Springs has attained a world wide reputation by reason of the opportunity for outdoor exercise afforded by the great number of fine days and the dryness and rarity of the air, helpful in cases of malarial diseases, asthma, and incipient phthisis. Students unable to work in other climates may here continue their studies while at the same time making a permanent gain in health.

COLLEGE BUILDINGS.

The buildings of the College are situated on a tract of about 50 acres, in the heart of the best residence portion of the city.

PALMER HALL, the oldest building on the campus, was first occupied in 1880. It contains, in addition to lecture-rooms, the chemical, physical and biological laboratories, and the museum. (See p. 74).

THE LIBRARY, given in 1894 by the late Mr. N. P. Coburn of Newton, Mass., and erected at a cost of $50,000, is of great architectural beauty and admirably adapted to its purpose. It is of the "Peach Blow" sandstone of Colorado, and its roof is of red tile with copper mountings. The interior, with its ceiling twenty-six feet high, its red oak woodwork, its picturesque galleries, its inviting alcoves, its great stone fireplaces, is exceedingly attractive. Long arched windows extend from floor to ceiling. A full sized cast of the "Winged Victory" of Samothrace stands at one end of the main hall. In recesses are fine marble busts of Antinous and Dante, and a cast of the Hermes of Praxiteles. Mr. A. L. Dickerman's collection of rare and valuable Indian curiosities adds to the interest of the room.

THE PRESIDENT'S RESIDENCE, at the northern boundary of the Campus, was purchased by the Trustees in 1888.

THE ASTRONOMICAL OBSERVATORY is the gift of Henry R. Wolcott, Esq., of Denver, and was completed in June, 1894. On the lower floor are a lecture room, a transit-room and a photographic dark room. Upstairs is the dome room, containing the equatorial telescope.

THE GYMNASIUM, built by the students of the College in 1891, contains an excellent assortment of apparatus. See "Physical Training," p. 46.

THE PERKINS FINE ARTS HALL, named for one of the principal donors, the late Willard B. Perkins, of Colorado Springs, was completed in 1900. It is a two-story stone building, erected at a cost of $30,000. The lower story is a large auditorium, seating 600, in which the chapel exercises are held and concerts and lectures are given. This room contains a valuable pipe organ, given by Miss Elizabeth Cheney, of Wellesley, Mass., in memory of her brother, Mr. Charles P. Cheney. In the hallway stands a bronze statue of the Flying Mercury. The upper story contains the studios, practice and lecture rooms of the Department of Fine Arts and the Conservatory of Music. In the exhibition room are hung collections of paintings loaned to the College by Mr. J. J. Hagerman and Mr. Verner Z. Reed. Mr. Louis R. Ehrich has presented Mr. Leslie J. Skelton's painting, "Meadow-Land, Montigny, France," as the nucleus of a permanent collection. To this has been added, through the instrumentality of Mr. Skelton, a picture by Iwill. There are also two paintings by Mr. Harvey Young: "Crystal Lake, California," the gift of Mr. Verner Z. Reed, and "La Sal Mountains," the gift of General William J. Palmer, Mr. James F. Burns and Mr. John G. Shields, and a valuable collection of Japanese prints, presented by Mr. Burns.

COLLEGE RESIDENCES.

HAGERMAN HALL is a substantial stone building, built in 1889, and used as a home for young men. It is under the supervision of Miss Ella Worden. Besides the students' rooms, which are well lighted and attractive, it contains a dining room, accommodating one-hundred and fifty persons, now used by a young men's boarding club, and the Y. M. C. A. reading room. In the upper story is the Weather Bureau office.

Montgomery Hall was erected and furnished in 1891 by the Woman's Educational Society, and presented free of debt to the College. It provides a comfortable home for the young women of the Academy. Its dining-room is now used by a young women's boarding club.

Ticknor Hall, the generous and beautiful gift of a friend of the College, was opened as a home for the young women of the College in January, 1898. Its comfort and conveniences are the result of careful study of the most perfect of recently-built dormitories for women. Besides students' rooms, it contains the College dining-room, drawing-rooms and guest-rooms, an infirmary capable of complete isolation, and a study-room, comfortably furnished and provided with reference books, for the use of all the young women of the College and Academy.

All the foregoing College buildings, except the Gymnasium, are of stone. Heat and electric light are furnished to all from a central plant.

South Hall, a commodious and convenient building finished in December, 1900, adjoins the campus and is leased by the College as a third residence for young women.

East House, a dwelling on North Weber street, one block from the campus, has been rented by the College for the present year as a fourth residence for young women.

No young woman will be received into the halls who is less than sixteen years of age and who is not taking at least fifteen hours' work or its equivalent. After all vacancies in the halls are filled, suitable rooms in the vicinity may be secured subject to the approval of the Dean of Women.

THE SCIENCE AND ADMINISTRATION BUILDING.

This building, which is to cost $240,000, is now in process of erection and will be completed during the coming year. It is to be two hundred and eighty-seven feet long with a depth from north to south of ninety-five feet. Besides a sub-basement six feet high, there are to be three stories, described in the plans as a basement and a first and second floor. The style of architecture is that which has been chosen for the entire system of buildings eventually to occupy the College reservation, the first example of which was presented in the Coburn library.

The structure is to be fire-proof with steel skeleton frames and concrete floors, overlaid with terazzo finish.

In the basement will be laboratories for Chemistry, Physics and Psycho-physics, and a large demonstration room.

On the first floor will be found the offices of administration and a number of lecture rooms. The second floor will contain the laboratories and lecture rooms for Biology, Geology, and Mineralogy. There will also be a large, well-lighted Museum for the natural science collections of the college.

It is the aim of the Faculty and Trustees to make this building contribute to the scientific development of the locality and of the State.

LIBRARY.

The Library building has been elsewhere described. In it are about thirty thousand volumes and as many pamphlets. The leading literary and scientific journals are received, as are also the United States Government publications and those of the State of Colorado. Of

United States documents the library now has about five thousand volumes, including the records of Congress complete from 1847, and many valuable records for the period 1774—1837. These documents are arranged on the plan adopted in the library of the Superintendent of United States documents at Washington.

The Medical Alcove was originated in 1894 when the late Dr. B. F. D. Adams, of Colorado Springs, presented to the College his extensive medical library. The El Paso Medical Society contributes the transactions of Medical Societies and standard works purchased by the Society. In 1896 the collection was enlarged by the gift of two hundred and fifty volumes and three hundred pamphlets from the late Dr. E. C. Kimball, of Colorado Springs. The whole collection has recently been re-catalogued.

In 1896 the control of the Library was vested in a board of twenty-five, composed of members of the Faculty and Board of Trustees and of persons not otherwise connected with the College, and the Library was opened to residents of the city. All the privileges of the Library, including the use of current magazines and periodicals, are open to the public on payment of the fee required of College students. The Library is open from 8:30 a. m. to 6 p. m.

The Coburn Library Book Club, organized in 1897, provides its members with the best new books, which are given to the Library after twelve months. The fee is $5 a year or $2 for three months. Members enjoy the full privileges of the Library. The Club has purchased about thirteen hundred books, of which nearly one thousand have been given to the general Library. During the past year the College Women's Club has given the nucleus of a collection of books on pottery.

READING ROOMS.

In the Library building is a reading room, where the current literary and scientific magazines, as well as a number of leading newspapers, may be consulted. The young men have the benefit of a similar room in Hagerman Hall, under the control of the Young Men's Christian Association of the College, while for the young women a study and reading room is provided at Ticknor Hall.

LABORATORIES AND APPARATUS.

In addition to the physical, chemical and biological laboratories, a mineralogical laboratory has been recently established. The equipment includes eight working collections and six mineralogical tables supplied with all the necessary apparatus.

The Observatory has a telescope of four inches aperture, presented by Mr. Henry R. Wolcott, of Denver, a transit instrument and a sidereal clock, both given by Mr. Charles S. Blackman of Montreal, Canada.

A Meteorological Observing Station is maintained by the College and daily records are made and reported to the United States Weather Bureau. A monthly report is also made to the Health Department of Colorado Springs. The instruments now in the station are dry and wet bulb thermometers, a maximum and a minimum thermometer, a Richards thermograph, a mercurial barometer, a self-registering anemometer, an anemoscope, a rain and snow gauge, and a Draper barograph.

MUSEUM.

An excellent foundation for a Museum was early laid by the gifts of Prof. J. H. Kerr, Rev. E. N. Bartlett, Dr. E. P. Tenney and Mr. George Fowler, and by the purchase of mineral and botanical collections from

the Rev. R. T. Cross and Prof. Marcus E. Jones respectively. The gifts in geology and zoology by Professor Kerr, donor of some two thousand specimens, were destined to be of special value, the former including as their central feature the Ward "College Collection" of over 600 representative minerals and rocks.

By far the largest and most important contributions to the Museum are the W. S. Stratton donation and the collection given by General William J. Palmer and the Colorado Springs Company. Through the generosity of Mr. Stratton large natural history collections, formerly at Coronado Beach, were secured in 1900 at a cost of $33,000 and are now stored, awaiting the completion of the Science Building. They include a large collection of mammals and birds; a superb and very extensive collection of minerals, common, commercial and rare; and a collection of casts and restorations of fossils, particularly of the more remarkable of the extinct Vertebrata. A few of the more noteworthy specialties are a mounted group of all the known genera of Marsupial Mammals, a group of mounted Orang Outangs (valued at about $3,000, owing to the diminishing number of these animals), the cast of Megatherium cuvieri, a gigantic ground-sloth, a complete mounted skeleton of one of the largest whales, and a restoration of the mammoth of the Ice Age, one of the largest and most remarkable single pieces ever exhibited in any museum, after an original made in Europe by Prof. Leo Phillipp Martin, assisted by Mr. G. Stainsky, now of Colorado Springs.

In 1896 General William J. Palmer and the Colorado Springs Company purchased for the College the large palaeontological cabinet of Professor Cragin, consisting of some eight thousand specimens

from Colorado, Kansas, Indian Territory, Texas and other states. It contains some mineral and zoological specimens, but is chiefly valuable for its palaeontological material, which includes remains of Pliocene horses, llamas, Miocene rhinoceroses and mastodons, Cretaceous saurians, Tertiary fishes, and a large series of shells, echinoderms, and other invertebrates from the lower Cretaceous. It is of importance, not only as supplying a large part of the geological record not otherwise represented in the museum, but also as being the elaborated result of years of research and containing the types of many new species and some new genera of fossils, both invertebrate and vertebrate. Among these type-fossils, the most important is the large plesiosaurian reptile *Trinacromerum*, the type of a new genus and species described from the Cretaceous of Kansas in 1888.

Valuable recent contributions to the Museum are the collection of fossil invertebrates, chiefly Tertiary Mollusca from the Atlantic slope, presented by Professor William B. Clark, of Johns Hopkins, State Geologist of Maryland, and the Educational Series of Rocks received from Mr. Charles D. Walcott, Director of the United States Geological Survey. The latter is a systematic collection of unaltered and metamorphic rocks, including those of mechanical, chemical, organic and igneous origin, together with a few specimens illustrating special geological processes. It includes 156 numbers, prepared and catalogued by Mr. Joseph S. Diller of the Survey.

In addition to those already mentioned, the Museum equipment in geology includes collections of rocks from the Cripple Creek mining district, presented by Prof. George H. Stone, and from New Hampshire (the N. H. Geological Survey Series), one of minerals from Lake

Superior, the Rufus M. Bagg collection of Foraminifera, and many miscellaneous specimens. In Zoology, the Museum has useful collections in sponges, corals, echinoderms, mollusks and birds, with small herpetological and osteological collections, and some material in other groups.

RELIGIOUS LIFE.

The College is distinctly Christian and recognizes Christian character as the highest attainment. It is unsectarian in its management. Inquiry is made as to the denominational affiliations of the students at entrance, and what churches in the city they desire to attend; lists are sent to the pastors of these churches, who seek out the students and bring about them the influence of church homes. Morning prayer is held in the chapel daily, attendance upon which is required of all students. Occasionally the service is shortened for the President's ethical talk, in which he discusses questions bearing directly on student life.

Occasional Vesper services are held in the chapel conducted by clergymen of various denominations. During the remainder of the present College year, these services will be regularly held and will be conducted by the Rev. Alexis W. Stein, of New York City. The Day of Prayer for Colleges is marked by appropriate observance. The weekly prayer meetings on Sunday afternoons are in charge of the student organizations.

The Young Men's and the Young Women's Christian Associations are represented by strong branches under the auspices of which are conducted mission work at home and abroad, and classes for Bible study. These associations send delegates to all the state and national conferences. The student volunteer move-

ment is also represented. Of the former members of the band some are continuing in other institutions their preparation for the foreign field, and others are already actively engaged in missionary work.

At the beginning of the College year members of the Associations meet all trains and welcome new students.

STUDENT PUBLICATIONS.

The *Tiger*, a weekly newspaper, is issued by an editorial board composed of College students. An *Annual* is published in May by the Junior class. A *Handbook* of information is issued at the beginning of the College year by the Y. M. C. A.

LITERARY SOCIETIES.

The Oratorical and Debating Society has charge of oratorical and debating contests. All students of the College are members of the Society, and may compete in the oratorical contest or for a place on the intercollegiate debating team.

The Apollonian Club, the Pearsons Literary Society and the Miltonian Club, composed of young men, and the Contemporary Club and Minerva Society, consisting of young women, hold weekly meetings for debate and other literary work.

COLORADO COLLEGE SCIENTIFIC SOCIETY.

The Colorado College Scientific Society was organized in 1890. Its objects are: "The discussion of recent scientific results, the promotion among its members of scientific inquiry and investigation, and the publication of the more important papers read at the meetings." Nine annual publications, entitled "Colorado College Studies," have been issued, and a large

number of exchanges have been secured from associations of a like nature, including several foreign societies. The attention which the "Studies" have received from scientific men everywhere encourages the society to continue this publication. The contents of Volume Nine are as follows:

Remarks upon Clifford's Proof of Miguel's Theorem.—*Dr. F. H. Loud.*

La Femme dans les Chansons de Geste.—*H. A. Smith.*

A Study of Some Teleosts from the Russell Substage of the Platte Cretaceous Series.—*Dr. F. W. Cragin.*

Students are encouraged to attend the monthly meetings of the Society.

The secretary of the Society, to whom all correspondence, exchanges, etc., should be addressed, is Dr. Florian Cajori.

OFFICERS OF THE AMUMNI ASSOCIATION.

Willis R. Armstrong, '99, . . .	President.
Homer Le Roy Shantz, '01, . . .	Vice President.
Della Gandy, '98, ...	Secretary.
Abner Downey, '00, ...	Treasurer.

UNIVERSITY EXTENSION.

University extension work has been carried on uninterruptedly since 1894. A large number of courses and single lectures have been given throughout the state. It is the purpose of the college to expand this work as facilities and opportunities increase.

The following lectures form the program for 1901-1902:—

Professor Parsons:

The Isle of Wight (two lectures); A Swiss University Town (two lectures); Oxford (two lectures).

Professor Ahlers:

Lessing and the Reform of the German Drama; The Structure

of a Model Tragedy; Lessing's Emilia Galotti; Schiller (two lectures); Goethe's Faust (two lectures).

Professor Richard T. Ely:
The Twentieth Century City.

Dr. Henry White Callahan:
Egypt.

Professor Cajori:
Modern Mysticism.

Professor Lancaster:
The Nervous System; The Brain; Age for Brain Growth; Effect of Sense Training on Brain; Effects of Sleep, Excitement, and Emotions; Health of the Young Child; Care of Sense Organs; Fatigue; Methods of Mind Growth; Expression in Drawing; Expression in Play; Expression in Language and Literature; Expression in Motion; Relation of Motor to Mental Action; Punishments—Purpose and Occasion; Growth and Health; Growth and Criminal Tendencies; Education of Defectives; Adolescent Characistics; The Adolescent in the Home.

GLEE CLUBS.

The College Glee Club is in its fifth year, and is under the direction of Mr. George Crampton of the Musical Faculty. A Mandolin Club of twelve members has also been organized, and accompanied the Glee Club on its tour in the Christmas vacation. The clubs gave concerts this year in the following places: Pueblo, Florence, Canon City, Salida, Buena Vista, Leadville, Glenwood Springs, Grand Junction, Eaton, Greeley, Denver, Cripple Creek, Victor and Colorado Springs, in this state; Lehi, Salt Lake and Ogden in Utah, and Evanston and Cheyenne in Wyoming.

The Young Women's Glee Club, under the leadership of Mr. Crampton, is now in its fourth year and is doing admirable work.

SPECIAL STUDENTS.

Special students will be received, at the discretion of the Faculty, into such classes as they are qualified to enter. It is the rule of the College that such students must attend the examinations as well as the ordinary recitations of their classes, subject to the same conditions as other students.

Several of the courses of lectures which form part of the College instruction, particularly in the department of Philosophy, are open to the public on payment of a small fee, and without any requirement of examination.

EXPENSES.

Tuition by the year	$35 00
Matriculation fee	5 00
Library fee	3 00
(From the above named fees there is no rebate in case of withdrawal.)	
Board in East House (club for young women), a week	3 00
Board in Montgomery Hall (club for young women), a week	2 50
Board in Hagerman Hall (club for young men), a week	3 00
Board in Ticknor Hall (college table), a week	4 00
Rooms warmed, furnished and lighted, a half-year, for each occupant	$20.00 to 40 00

The number of rooms under $40 is limited. Application should be made early. Rooms are rented by the term and will be retained for incoming students only when the application is accompanied by a deposit of $5. This fee will be credited on the bills for room rent and will be refunded only in case the room is given up by September first.

Students are required to furnish towels, bed linen and blankets.

Fees of the College physician:

Office consultation	$ 50
Visits to rooms	1 00

For prolonged illness and in cases of contagious disease, a special nurse is employed, and the expenses are charged to the patient.

COLLEGE BILLS.

The bills for tuition and room rent are issued at the beginning of each half-year, and are payable immediately, unless special arrangements are made in the proper offices.

Students who withdraw before the end of the term pay full tuition. Students who withdraw from college less than six weeks before the end of the term pay full room rent. Board bills are payable monthly, in advance, and no rebate is made for absences of less than a week.

PECUNIARY ASSISTANCE.

SCHOLARSHIPS.—The income of the following scholarships is devoted to the aid of worthy students who may need assistance in completing their course, and who, by their scholarship and character, prove themselves worthy of such assistance.

The Thomas Davee Scholarship of $500, established by the late Mrs. T. V. D. Mitchell, of West Minot, Maine.

The Rice Scholarship of $700, established by friends of the Rev. Chas. B. Rice, D. D., of Danvers, Mass.

The Currier Scholarship of $1,000, founded by the late Hon. Warren Currier, of St. Louis, Mo.

The Edwards Scholarship of $500, given by the Congregational Church of Wellesley Hill, Mass.

The Mary Caroline Quincy Scholarship of $500, given by the late Mr. George Henry Quincy, of Boston, Mass.

The Lawrence Myers Scholarship of $1,000, and the Lucy Platt Myers Scholarship of $1,000, given by Mrs. Laetitia M. Myers, of Plainfield, New Jersey.

The Fay Scholarship of $1,000, founded by the late Eliza A. Fay, of Boston, Mass.

A Scholarship of $1,000, given by Mr. William F. Richards, of Newport, N. H., through the Woman's Educational Society of Colorado College.

The Willard B. Perkins Scholarship of $7,000. The second Willard B. Perkins Scholarship of $7,000. These two scholarships were given by the late Willard B. Perkins, of Colorado Springs.

The Hawley Scholarship Fund, now amounting to about $10,000, founded by the will of Mrs. Mary R. Hawley, of Baltimore, Md., the annual income of which is used in the payment of scholarships of such young women of the College as the Faculty may recommend, preference being given to those who are fitting themselves for Christian work. This year six scholarships are offered from this fund.

The Hawley Memorial Fund, now amounting to about $7,500, founded by the will of Mrs. Mary R. Hawley, of Baltimore, Md., in memory of her husband, Mr. Martin Hawley, the annual income of which is loaned to "worthy and deserving students of the College, as the Faculty may see proper."

The Strettell Memorial Fund of $2,000, given by Mrs. Alma G. V. Harrison of London, England, and General William J. Palmer of Colorado Springs, in memory of Mr. Arthur E. V. Strettell, Mrs. Harrison's brother, who died in Colorado Springs in 1882. The income of this fund is to be used to aid students suffering from lung troubles.

The Mary G. Slocum Scholarship of $100 a year, given by the Woman's Educational Society of Colorado College. This scholarship is open for competition to young men of the Junior Class.

Several other scholarships are supported by annual subscription.

THE HOSPITAL FUND.—The Trustees of the Bellevue Sanatarium have given to the College nearly $4,000 as the nucleus of a hospital fund for students.

SELF-SUPPORT.—Advanced students of high standing have occasional opportunities for private teaching. Capable and faithful young men can often find work in town. A limited amount of service in Montgomery and Ticknor Halls is offered to young women. This is not often available for first year students.

THE HASTINGS PRIZES.

The sum of $500 has been given by Mr. F. R. Hastings, of Colorado Springs, the income of which is to be used in providing prizes for the best two theses written by students in the course on the Evolution of Religious Thought.

THE COLORADO COLLEGE PARK ASSOCIATION.

During the past year, the Colorado College Park Association has subscribed nearly $7,000, which has been expended in parking the campus. General William J. Palmer has provided for the maintenance of the park for five years by an annual contribution of $1,000.

THE WOMAN'S EDUCATIONAL SOCIETY.

This Society was formed in April, 1889, by the women of Colorado Springs. Its purpose, as expressed

in its constitution, "is to give physical, intellectual and spiritual aid to students in any department of Colorado College." This Society built Montgomery Hall, furnished Ticknor and South Halls, and has been of service in many ways to the College. Its members endeavor to come into personal relations with the students, especially with those who are supporting themselves; they try to find work for them and by friendly advice assist them in their efforts to secure an education. The membership fees go to form a beneficiary fund, from which loans are made on the following conditions:

First—Loans may be made to students who have been in the College for one term and are recommended by the Faculty as in every way deserving of such aid.

Second—No student shall be allowed to incur an indebtedness to the Society of more than $300.

Third—Students may receive loans without interest until their connection with the College ceases; after that time their notes shall draw interest at 4 per cent.

The Society has received from Mr. William F. Richards, of Newport, N. H., a scholarship of $1,000, and from Mrs. Mary R. Hawley, a legacy of $10,000, (see p. 83.) The society has also established the Mary G. Slocum scholarship, (see p. 84.)

The officers for the current year are:

President—Mrs. William F. Slocum.
First Vice-President—Mrs. John R. Hanna.
Second Vice-President—Mrs. Francis W. Goddard.
Third Vice-President—Mrs. L. A. E. Ahlers.
Recording Secretary—Miss Elizabeth Martin.
Corresponding Secretary—Mrs. William Strieby.
Treasurer—Mrs. Florian Cajori.

THE NEEDS OF THE COLLEGE.

Colorado College, never more truly than today, has great and pressing needs. The College stands upon a

firm financial basis; but greater facilities in the way of equipment are an immediate necessity. The trustees and faculty feel it imperative that the opportunity for service which lies before the College, and the conditions by which this opportunity can be embraced, be understood. The urgent demands of the hour should be realized, not only by those who in previous years have nobly aided the College, but by all persons who are interested in the cause of learning, in the progress of science, and in the growth and development of the best educational institutions as a safeguard for republican government. Among the needs which force themselves upon attention are the following:

General Endowment.—The growth of the College has been so great that an increase of one million in its endowment funds is seriously needed.

Endowment of Professorships.—It is greatly to be desired that the chairs in the various departments be permanently endowed. This need has come to be urgent by reason of the rapid growth in numbers and the consequent demands for instruction and for more complete courses.

Funds for the Library.—The permanent fund for purchasing books is too small, and both the regular work of the College and the value of the Library to the city are seriously hampered by this limitation. The College appeals earnestly to lovers of books for money to use for this purpose, either to be added to the permanent fund or to be immediately expended.

Special Funds for Scientific Research.—Money to be devoted to scientific work in special lines is very greatly needed. The opportunities of Colorado College in this direction are unusual, because of the geographical, meteorological and geological situation. The at-

tention of those interested in the advancement of science is earnestly called to this fact.

Physical Apparatus.—The Physical Laboratory and the Observatory possess some very good apparatus, but a great deal more is needed for effective work in advanced classes and for the purpose of original investigation. With a few thousand dollars our facilities could be immensely enlarged.

Museum Building.—The various scientific collections of the College have already outgrown the space allotted to them in Palmer Hall. A large number of specimens which would be valuable for class-room work, as well as of general public interest, are still packed away because there is no room to exhibit them. A building permanently endowed which will adequately house these valuable collections and provide for the future is one of the great needs of the College.

Residence Halls.—It is hoped that the young men may soon be provided with another residence hall, as the need is most pressing. Ticknor, Montgomery and South Halls, which are used as homes for the young women of the College and Academy, are also found inadequate to supply the demand for rooms.

Scholarship Funds.—The Trustees desire to emphasize the fact that many young people in a new country are obliged to earn their education by hard and self-denying work. Colorado College needs a large addition to her scholarship funds. Money thus applied tends directly to the profit of the individual and of the country.

Infirmary Building.—The infirmary in Ticknor Hall, which is available for young women only, is inadequate for the growing needs of the College. A

separate building, in which contagious diseases can be cared for as well as ordinary cases of illness, is a necessity.

FORMS OF BEQUEST.

Those who intend to devise property to Colorado College, or to the Woman's Educational Society, are requested to employ one of the following Forms of Bequest:

"I hereby give, devise and bequeath unto The Colorado College, of Colorado Springs, Colorado, the sum of..... .....Dollars."

"I hereby give, devise and bequeath unto the Woman's Educational Society of Colorado College, of Colorado Springs, Colorado, the sum of..... .... Dollars."

If property other than money is willed, the form should be correspondingly varied.

III

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1903

LIBRARY
OF THE
UNIVERSITY of ILLINOIS

Colorado College

AND

Cutler Academy

1903

TWENTY-NINTH

ANNUAL BULLETIN

—OF—

COLORADO COLLEGE

—AND—

CUTLER ACADEMY

COLORADO SPRINGS, COLORADO
1903

COLORADO SPRINGS
The Out West Printing and Stationery Company
1903

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CALENDAR.

1903.

April 8	Wednesday	Easter Recess begins at 1 P. M.
April 16	Thursday	Easter Recess ends at 8:15 A. M.
May 30	Saturday	Memorial Day; a holiday.
June 1	Monday	Examinations begin. First Entrance Examinations begin.
June 7	Sunday	Baccalaureate Sermon.
June 8	Monday	Cutler Academy Graduation.
June 9	Tuesday	Class Day.
June 10	Wednesday	Commencement.
Sept. 8	Tuesday	Second Entrance Examinations. Residence Halls open.
Sept. 9	Wednesday	First half-year begins at 8:15 A. M.
Nov. 3	Tuesday	Election Day.
Nov. 11	Wednesday	Insignia Day.
Nov. 26	Thursday	Thanksgiving Day; a holiday.
Dec. 18	Friday	Christmas recess begins at 5 P. M.

1904.

Jan. 5	Tuesday	Christmas Recess ends at 8:15 A. M.
Jan. 18	Monday	Mid-year Examinations begin.
Jan. 25	Monday	Second half-year begins at 8:15 A. M.
Jan. 28	Thursday	Day of Prayer for Colleges.
Feb. 22	Monday	Washington's Birthday; a holiday.
Mar. 30	Wednesday	Easter Recess begins at 1 P. M.
April 7	Thursday	Easter Recess ends at 8:15 A. M.
May 30	Monday	Memorial Day; a holiday.
May 31	Tuesday	Examinations begin. First Entrance Examinations begin.
June 5	Sunday	Baccalaureate Sermon.
June 6	Monday	Cutler Academy Graduation.
June 7	Tuesday	Class Day.
June 8	Wednesday	Commencement.

ANNOUNCEMENT.

Colorado College is the oldest institution of higher education in the State. In 1874, while Colorado was yet a territory, a College upon a broad Christian foundation was established in Colorado Springs. The authorized announcement for that year contains the following words:

"It is the purpose of the Trustees to build a College in which liberal studies may be pursued under positive Christian influences. . . . The College is under no ecclesiastical or political control. Members of different churches are on its Board of Trustees. . . . The character which is most desired for this college is that of thorough scholarship and fervent piety, each assisting the other, and neither ever offered as a compensation for the defects of the other."

From the beginning the Board of Trustees has been composed of leading professional and business men of Colorado, together with a few Eastern men of similar standing, and has ever been animated by the purpose avowed by the original Board.

A grant of land had been made in advance of the organization of the College, in 1873, by the Colorado Springs Company, the founders of the City of Colorado Springs. The Rev. Jonathan Edwards was the first professor and executive officer. The first President, the Rev. James G. Dougherty, was elected in 1875, and was succeeded in the following year by the Rev. E. P. Tenney. From 1885 to 1888 there was no President, but the work of teaching was carried on without interruption. At this time there was only one building on the campus, Palmer Hall, erected in 1880.

In the autumn of 1888 William Frederick Slocum was elected President. The faculty was at once enlarged, the

courses re-organized, and Cutler Academy incorporated as an associated preparatory school, in which students have since been trained, not only for Colorado College, but for all the leading institutions of the United States. Within the following two years $100,000 was given toward endowment, entirely from within the State of Colorado. Hagerman Hall was built in 1889. In the same year the Woman's Educational Society was organized and began the work of building Montgomery Hall. In 1890 the Colorado College Scientific Society was founded, and the first installment of its annual publication, "Colorado College Studies," was issued.

Within the past decade the sum of $400,000 has been added to the endowment, and the growth of the College in numbers has been equalled by an appropriate enlargement of equipment and activity. Among the marks of advance are the Gymnasium, built by the efforts of students; the Library building, given by the late N. P. Coburn; the Observatory, the gift of Henry R. Wolcott, of Denver; and Ticknor Hall, completed during the closing days of 1897, as a second dwelling house for young women. The entire cost of this beautiful building, exceeding $23,000, was met by Miss Elizabeth Cheney of Wellesley, Mass. In 1900 the Perkins Fine Arts Hall was built at a cost of $30,000. The first floor is an auditorium, used for the religious services of the College and other public meetings. The second story is occupied by the Departments of Fine Arts and Music.

The new Science building, to be known as Palmer Hall, will be completed next fall at a cost of $270,000, and its equipment will cost $50,000 additional. It will contain the general offices of administration and laboratories for scientific work in all departments.

Growth in other directions during the last seven years is indicated by the establishment of a course leading to

the degree of Bachelor of Science, by the College Lecture work, by the addition of an Art Department, and by the establishment of the School of Engineering. While not without needs that are keenly felt, the College has won an assured position, and offers to its students educational facilities of the same grade as are found at Eastern institutions of the higher learning.

TRUSTEES.

William F. Slocum, *President of the Board*,	24 College Place.
George W. Bailey,	309 McPhee Building, Denver.
Rev. David N. Beach, D. D.,	Boston, Mass.
William P. Bonbright,	1222 N. Cascade Ave.
Rev. Edward H. Braislin, D. D.,	2115 N. Cascade Ave.
John Campbell,	1401 Gilpin St., Denver.
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J. J. Hagerman,	Roswell, New Mexico.
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William Lennox,	1000 N. Nevada Ave.
Horace G. Lunt,	431 N. Cascade Ave.
William J. Palmer,	Glen Eyrie.
George Foster Peabody,	27 Pine St., New York.
Philip B. Stewart,	Wood Ave.
Mahlon D. Thatcher,	Hill Crest, Pueblo.
Frank Trumbull,	1439 Franklin St., Denver.

STANDING COMMITTEES OF THE TRUSTEES.

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William J. Palmer, *Chairman;* William P. Bonbright, Thomas S. Hayden, William Lennox, Philip B. Stewart.

INSTRUCTION.

Philip B. Stewart, *Chairman;* Edward H. Braislin, John Campbell, James B. Gregg, Horace G. Lunt.

COLLEGE OFFICERS.

William F. Slocum, President. Edward S. Parsons, Vice-Pres.
James B. Gregg, Secretary. George N. Marden, Treasurer.
Nelle Priscilla Sater, Cashier.

BOARD OF CONTROL OF THE N. P. COBURN LIBRARY.

Chairman—President Slocum.

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Mr. Leslie J. Skelton.
Mrs. W. F. Slocum.
Dr. S. E. Solly.
Mrs. Philip B. Stewart.
Rev. A. N. Taft.
Mrs. A. E. Touzalin.
Prof. T. K. Urdahl.

FACULTY.

WILLIAM FREDERICK SLOCUM, D.D., LL.D. 24 College Place.

President and Head Professor of Philosophy.

A. B. (Amherst), '74; B. D. (Andover), '78; LL. D. (Amherst), '93; LL. D. (Nebraska), '94; D. D. (Beloit), '01; Colorado College, '88.

LOUIS A. E. AHLERS, A. B. South Hall.

Head Professor of Modern Languages and Literatures.

A. B. (Harvard), '94; Colorado College, '95.

ERNEST BREHAUT, A. M. 611 N. Tejon St.

Instructor in Latin.

A. B. (Dalhousie), '94; A. B. (Harvard), '96; A. M. (*ibid.*), '97; Colorado College, '98.

MARIANNA BROWN, A. M. Hagerman Hall.

Instructor in Latin.

A. B. (Earlham College), '76; A. M. (Cornell), '94; Professor of Greek, Earlham College, '94–'01; Colorado College, '02.

FLORIAN CAJORI, Ph. D. 1119 Wood Ave.

Head Professor of Mathematics.

S. B. (Wisconsin), '83; M. S. (*ibid.*), '86; Ph. D. (Tulane), '94; Assistant Professor of Mathematics, Tulane, '85–'87; Professor of Applied Mathematics, Tulane, '87–'88; United States Bureau of Education, '88–'89; Colorado College, '89.

MELVILLE FULLER COOLBAUGH, B. S. 220 E. Cimarron St.

Instructor in Chemistry.

B. S. (Colorado College), '02; Colorado College, '02.

ANNA PEARL COOPER, A. B. 17 N. Wahsatch Ave.

Instructor in English and History.

A. B. (Colorado College), '96; Colorado College, '99.

FRANCIS WHITTEMORE CRAGIN, Ph. D. 1715 Wood Ave.

Professor of Geology, Mineralogy, and Palæontology.

Agassiz Laboratory, Newport, '81; S. B. (Harvard), '82; Ph. D. (Johns Hopkins), '99; Professor of Natural History, Washburn, '82–91; Assistant Geologist, State Geological Survey of Texas, '92–'93; Colorado College, '91.

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Instructor in Latin.

A. M. (Aberdeen), '94; Colorado College, '03.

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A. B. (Brown), '83; A. M. (*ibid.*), '86; Instructor in Phillips Academy, Andover, Mass., '83–'92; Assistant Professor of Greek, Chicago, '92–'94; Colorado College, '92.

HENRY C. HALL. 1401 Wood Ave.

Lecturer in Law.

FREDERIC R. HASTINGS, A. M.

Lecturer on the History of Philosophy.

Worcester, (Mass.), Polytechnic Institute, '83–'85; PH. B. (Colorado College), '91; A. M. (*ibid.*), '92; Colorado College, '99.

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Associate Professor of Modern Languages and Literatures.

A. B. (Cornell) '92; Fellow (*ibid.*), '92–'93; Student at the Sorbonne, '93–'94; Professor of Modern Languages, Rollins College, '95–'01; Dean (*ibid.*) '98–'01; Director of English Instruction in the Cuban Summer School, Harvard, '00; Colorado College, '02.

EDITH PRESTON HUBBARD, A. B. Montgomery Hall.

Instructor in Mathematics.

A. B. (Vassar), '01; Colorado College, '02.

ELLSWORTH GAGE LANCASTER, B. D., PH. D.
1511 N. Nevada Ave.

Assistant Professor of Philosophy and Pedagogy.

A. B. (Amherst), '85; A. M. (*ibid.*), '88; B. D. (Andover), '89; PH. D. (Clark), '97; Colorado College, '97.

RUTH LOOMIS, A. B. Ticknor Hall.

Dean of Women.

A. B. (Vassar), '85; Instructor in English, Vassar, '86–'95; Colorado College, '96.

FRANK HERBERT LOUD, PH. D. 1203 N. Tejon St.

Professor of Mathematics and Astronomy.

A. B. (Amherst), '73; A. M. (Harvard), '99; PH. D. (Haverford), '00; Walker Instructor in Mathematics, Amherst, '73–'76; Instructor in Geometry, Smith, '79; Colorado College, '77.

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Medical Adviser for Women.

M. D. (University of Colorado), '93; Clinical Obstetrician, University of Colorado, '93–'95; Post Graduate, School of Medicine and Polyclinic, New York, '95; Allgemein Polyclinic, Vienna, '96; Colorado College, '95.

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Assistant Professor of English and Greek.

A. B. (Yale), '85; Colorado College, '92.

MARION EDWARDS PARK, A. B. Ticknor Hall.

Instructor in Greek and Latin.

A. B. (Bryn Mawr), '98; American School at Athens, '01–'02; Colorado College,'02.

EDWARD S. PARSONS, A. M., B. D. 1328 N. Nevada Ave.

Vice-President, Dean and Bemis Head Professor of English.

A. B. (Amherst), '83; A. M. (*ibid.*), '86; B. D. (Yale), '87; Colorado College, '92.

SIDNEY F. PATTISON, A. B. Hagerman Hall.

Instructor in English.

A. B. (Rochester), '98; A. B. (Williams), '99; Colorado College, '99.

ROWLAND H. RITCHIE, Ph. B. 1627 N. Weber St.

Instructor in Public Speaking.

Ph. B. (Chicago), '00; Colorado College, '00.

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Instructor in Biology.

S. B. (Colorado College), '01; Colorado College, '01.

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Professor of Physics.

A. B. (Princeton), '91; M. S. (Cornell), '92; Ph. D. (Wisconsin), '99; Professor of Physics, Marietta, '93–'97; Instructor in Physics, Wisconsin, '99–'00; Colorado College, '00.

HUGH ALLISON SMITH, A. M. 329 E. Cache La Poudre St.

Assistant Professor of Modern Languages.

A. B. (Missouri), '97; A. M. (*ibid.*), '98; Assistant in the Department of Romance Languages, Missouri, '97–'98; Colorado College, '99.

WILLIAM E. STARK, A. M. 122 E. Uintah St.

Instructor in Physics and Acting Principal of Cutler Academy.

A. B. (Harvard), '95; A. M. (*ibid.*), '01; Colorado College, '02.

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Professor of Chemistry and Metallurgy.

A. B. (University of New York), '75; E. M. (Columbia School of Mines), '78; A. M. (University of New York), '79; Principal Santa Fe Academy, '78–'80; Colorado College, '80.

THOMAS K. URDAHL, Ph. D. 1111 Wood Ave.

Professor of Political and Social Science.

B. L. (Wisconsin), '91; M. L. (*ibid.*) '92; Ph. D. (*ibid.*), '97; Assistant in Economics (*ibid.*), '99–'00; Colorado College, '00.

ARTUS VAN BRIGGLE. 1712 N. Nevada Ave.

Critic in Art.

Cinti Art Academy, '87–'93; Duveneck School of Painting, '91–'92; Student Colarrassi School, '93–'96; pupil of Jean Paul Laurens and Benjamin Constant, Julians, Paris, '93–'96; Colorado College, '03.

FRANCES SEDGWICK WIGGIN, B. L. South Hall.

Librarian.

B. L. (Wisconsin), '82; Colorado College, '98.

CLARENCE WILBER BOWERS. 1005 N. Wahsatch Ave.

Instructor in Piano-forte, Organ, Harmony and Counterpoint.

Graduate, New England Conservatory of Music, Boston; Pupil of G. W. Chadwick and Ferruccio Busoni, '90–'92; Pupil of Alexandre Guilmant, Paris, '95–'96; Organist and Instructor in Music in Seminary and Academy, Andover, Mass., '91–'92; Professor of Instrumental Music and Harmony, Cornell College, Mt. Vernon, Iowa, '92–'95; Colorado College, '96.

MRS. MAUD S. FAUST.

Instructor in Piano-forte.

The Vassar Music School, '94; Diploma American Society of Musicians, '94; Colorado College, '01.

WILLIAM J. FINK.

Instructor in Violin.

Pupil of Baron Leon Devay, Hungarian School; Colorado College, '02.

SAMUEL JESSOP. 208 E. Dale St.

Instructor in Voice Culture.

Honor Certificate, Royal Academy of Music, '84; Organist and Choirmaster, Dartford Parish Church, London, '91–'01; Colorado College, '02.

STANDING COMMITTEES OF THE FACULTY.

ACCREDITED SCHOOLS.

Professor Lancaster, *Chairman;* Professor Smith, Mr. Brehaut, Mr. Stark.

ART.

Mr. Van Briggle, *Chairman;* Miss Park, Miss Loomis.

ATHLETICS.

Professor Ahlers, *Chairman;* Professors Cajori, Smith.

COURSES OF STUDY OF INDIVIDUAL STUDENTS.

College—Professor Parsons, *Chairman;* Professors Cajori, Noyes, Miss Loomis.

Academy—Mr. Stark, *Chairman;* Professors Cajori, Shedd, Miss Loomis.

DISCIPLINE.

College—The President, *Chairman;* Professors Parsons, Cajori, Mr. Pattison.

Academy—Mr. Stark, *Chairman;* The President, Professor Strieby.

HAGERMAN HALL.

Professor Shedd, *Chairman;* Professor Lancaster, Mr. Stark.

MUSIC.

Professor Parsons, *Chairman;* Miss Loomis, Mr. Jessop.

POST-GRADUATE DEGREES.

Professor Lancaster, *Chairman;* Professors Cragin, Urdahl.

PUBLICITY.

Professor Hills, *Chairman;* Professors Ahlers, Noyes.

SCHEDULE AND PUBLICATIONS.

Professor Cajori, *Chairman;* Professor Loud, Mr. Brehaut, Mr. Pattison.

SCHOLARSHIPS.

The President, *Chairman;* Professor Parsons, Miss Loomis, Miss Park.

STUDENTS' SELF-HELP.

Professor Lancaster, *Chairman;* Mr. Ritchie, Miss Cooper.

CLASS OFFICERS.

College.	Academy.
Seniors—The President.	IV—Mr. Stark.
Juniors—Prof. Lancaster.	III—Mr. Shantz.
Sophomores—Prof. Ahlers.	II—Miss Hubbard.
Freshmen—Mr. Pattison.	I—Professor Noyes.
Special Students—Prof. Strieby.	*Special Students*—Mr. Ritchie.

ADMISSION.

Registration.

Before registering, each candidate must present to the Dean a certificate of moral character signed by some responsible person in the community in which he has made his home. Students are required to register promptly and attend the first exercises in their courses.

Entrance Examinations.

Candidates for admission to the Freshman Class, unless admitted by certificate (see p. 18), must pass examinations in one of the following groups:

A. B. Group.

1. Greek.—(*a.*) A thorough knowledge of grammar and accentuation. (*b.*) Four books of the Anabasis. (*c.*) Three books of the Iliad, with prosody and dialectic forms. (*d.*) Translation at sight of average passages from Xenophon and Homer. (*e.*) The translation into Greek of a passage of connected discourse (Collar and Daniell's Greek Prose Composition, or an equivalent). (*f.*) An outline knowledge of Greek history.

2. Latin.—(*a.*) An accurate and ready knowledge of grammatical forms. (*b.*) Cæsar: Gallic War, Bks. I-IV, or an equivalent. (*c.*) Cicero: seven orations. (*d.*) Vergil: Aeneid, Bks. I-VI. (*e.*) Translation at sight of easy passages of prose Latin. (*f.*) Prose Composition (Daniell, or Moulton and Collar.) (*g.*) An outline knowledge of the history of the Roman Republic.

3. English.—(*a.*) The candidate will be required to write a short essay which will be judged from the standpoint of thought, spelling, punctuation, grammar and division into paragraphs, on topics chosen, in 1903, 1904 and 1905, from the following works:

Shakespeare's Merchant of Venice and Julius Cæsar; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Carlyle's Essay on Burns; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

All these books are to be read carefully and intelligently. Minute knowledge of them will not be required, but the candidate will be expected to have clearly in mind their important parts.

(*b.*) In addition to the above, the candidate will be required to pass an examination on the subject matter, form and other literary qualities of the following books: Shakespeare's Macbeth; Milton's Lycidas, Comus, L'Allegro, and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

A mastery of the essentials of English Grammar will also be required of all candidates.

4. German or French.—A good elementary knowledge of the language, sufficient for reading easy prose at sight. See outlines of courses, "German A" and "French A," on pp. 33 and 35 respectively.

5. Mathematics.—(*a.*) Algebra, through simultaneous quadratic equations. (*b.*) Elementary Plane Geometry: the equivalent of the first five books of Phillips and Fisher's, Wells' or Wentworth's Geometry.

Candidates who have completed the entrance requirements for the Ph. B. course, but wish to enter the A. B. course, will be allowed to do so on condition that they take Greek through all four years.

Ph. B. Group.

1. Latin, English, German or French, and Mathematics.—As in the A. B. Group.

2. Physics.—One year of work: not less than two hours per week of recitation, and four of laboratory work; Carhart and Chute's Elements of Physics, or Wentworth and Hill's Text-Book of Physics, or an equivalent.

3. Chemistry.—Williams' Elements of Chemistry, or an equivalent.

4. Botany.—Any elementary botany, such as those of Bailey, Bergen, Atkinson, Bessey, or Coulter.

5. Physiology.—Martin's Briefer Course, or an equivalent.

6. American or English History.—An outline knowledge of the leading facts.

S. B. Group.

1. Physics, Chemistry, Botany, Physiology, American or English History, and English.—As in the Ph. B. Group.

2. Languages.—Latin, German or French, amounting collectively to four full years of work, two of which must be in Latin or German.

3. Mathematics.—(*a.*) Algebra, through simultaneous quadratic equations; (*b.*) Plane Geometry: the equivalent of the first five books of Phillips and Fisher's, Wells' or Wentworth's Geometry; (*c.*) Solid and Spherical Geometry; (*d.*) Plane Trigonometry.

Admission by Certificate.

Candidates who offer satisfactory evidence of having completed a preparatory course equivalent to any one of the above named groups, will be admitted without condition into the Freshman Class in the corresponding course. Each candidate must bring from his principal a personal statement as to his grade of scholarship.

Accredited Schools.

The following schools are on the accredited list; certificates of the satisfactory completion, in any of them, of any branch in the course of study required for admission to the College, will be accepted in lieu of examination.

Aspen High School.
Canon City High School.
Canon City So. Side High School.
Central City High School.
Cheyenne (Wyo.) High School.
Colorado Springs High School.
Cripple Creek High School.
Delta High School.
Denver: High School, Dist. No. 1.
" High School, Dist. No. 2.
" High School, Dist. No. 7.
" High School, Dist. No. 17.
" Manual Training High School.
Douglas Co. H. S., Castle Rock.
Durango High School.
Florence High School.
Fort Collins High School.
Fort Morgan High School.
Georgetown High School.
Golden High School.
Gordon Academy, Salt Lake City.
Grand Junction High School.
Greeley High School.
Idaho Springs High School.
Leadville High School.
Longmont High School.
Manitou High School.
Montclair High School.
Monte Vista High School.
Otero Co. High School, La Junta.
Ouray High School.
Pueblo High School, Dist. No. 1.
" High School, Dist. No. 20.
Salida Academy.
Salida High School.
Telluride High School.
Trinidad High School.
Victor High School.
Walsenberg High School.
Wheat Ridge High School, Alcott.
Miss Wolcott's School, Denver.
Wolfe Hall, Denver.

Entrance Examinations.

Examinations for admission to the College will be held in Palmer Hall on Monday and Tuesday, June 8 and 9, 1903, and again on Tuesday, September 8, 1903. No examination will be held between these dates, but delayed examinations may be held after the beginning of the fall term for the accommodation of students who, for good reason, have been unable to attend at the regular time.

For the accommodation of students residing at a distance, examinations will be held under the direction of

authorized persons at various points in and near the State, as need may require. The cities of Cheyenne, Wyo., Denver, Pueblo, Trinidad, Leadville, Montrose and Grand Junction, Colo., and Las Vegas, N. M., are points where such arrangements can readily be made, and others may be added, if necessary. But students who desire examinations at these or other points must notify the President at least three weeks in advance of the time of the regular examination.

Admission to Advanced Standing.

Students will be received into advanced classes on examination in the studies of the preceding year. The Faculty may, at their discretion, receive certificates from other colleges as evidence that the student has satisfactorily pursued those or equivalent studies.

COURSES OF STUDY.

Three courses of study are offered in the College. The course leading to the degree of Bachelor of Arts corresponds to that which the best Eastern Colleges require for the same degree. In the course leading to the degree of Bachelor of Philosophy there is no Greek, and less Latin than in the course for Bachelor of Arts; but the required work includes more of the Sciences and Modern Languages. The course leading to the degree of Bachelor of Science is so arranged that special attention may be devoted to any one of five principal lines of study, Mathematics, Physics, Chemistry, Biology or Geology.

For graduation a student must have completed a total requirement of 60½ hours a week—16 a week during Freshman year, 15 during Sophomore year, 15 during Junior year, and 14½ during Senior year.

OUTLINE OF COURSES.

Freshman Year.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	Mathematics A (a) (p. 39)	4	Mathematics A (a) (p. 39)	4	Mathematics A (a) (p. 39)	4
	French B (p. 35) or German B (p. 33)	3 or 3	French B (p. 35) or German B (p. 33)	3 or 3	French or German (pp. 35, 33)	3
	English B (p. 32)	3	English B (p. 32)	3	English B (p. 32)	3
	Greek A (p. 30)	3	Latin A (p. 31) or French A* (p. 35) or German A* (p. 33)	3 or 3 or 3	Chemistry B (p. 42)	3
	Latin A (p. 31)	3	Biology A (p. 43)	3	Biology A (p. 43)	3
Second Half	Mathematics A (b) (p. 39)	2	Mathematics A (b) (p. 39)	2	Mathematics A (c) (p. 39)	2
	Mathematics A (c) (p. 39)	2	Mathematics A (c) (p. 39)	6	French or German (pp. 35, 33)	3
	French B (p. 35) or German B (p. 33)	3 or 3	French B (p. 35) or German B (p. 33)	3 or 3	English B (p. 32)	3
	English B (p. 32)	3	English B (p. 32)	3	Chemistry B (p. 42)	3
	Greek A (p. 30)	3	Latin A (p. 31) or French A* (p. 35) or German A* (p. 33)	3 or 3 or 3	Biology A (p. 43)	3
	Latin A (p. 31)	3			(Choose Courses to Make a Total of 16 Hours.)	
	Elective.				Physics G (p. 41)	2
	Mathematics A (d) (p. 39)	2	Biology A (p. 43)	3	Mathematics A (d) (p. 39)	2
					Mathematics D (p. 40)	2
					Meteorology (p. 40)	3

* Whichever was not offered as part of the preparation for College.

OUTLINE OF COURSES—Continued.

Sophomore Yr.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	English C (p. 32)	3	French or German (pp. 35, 33)	3	French or German (pp. 35, 33)	3
	French or German (pp. 35, 33)	3	Chemistry B (p. 42)	3	English C (p. 32)	3
	Physics A* (p. 41) or Biology A* (p. 43)	3	Physics A (p. 41)	3	Physics B (p. 41)	4
			English C (p. 32)	3	Additional requirement (p. 23)	6
	Elective. (Choose Courses to Make a Total of 15 Hours.)		*Elective.* (Choose Courses to Make a Total of 15 Hours.)			
	Latin B (p. 31)	3	Latin B (p. 31)	3		
	Public Speaking B (p 33)	2	Public Speaking B (p. 33)	2		
	Greek B (p. 30)	3	Mathematics B (a) (p. 39)	3		
	Mathematics B (a) (p. 39)	3	Mathematics C (p. 40)	3		
	Astronomy A (p. 40)	3	Astronomy A (p. 40)	3		
	History A‡ (p. 39)	2	History A‡ (p. 39)	2		
	Bible (p. 47)	1	Bible (p. 47)	1		
	Biology A (p. 43)	3	Biology B or C (pp. 43, 44)	3		
Second Half	English D (p. 32)	3	French or German (pp. 35, 33)	3	English D (p. 32)	3
	French or German (pp. 35, 33)	3	Chemistry B (p 42)	3	French or German (pp. 35, 33)	3
	Physics A* (p. 41) or Biology A* (p. 43)	3	Physics A (p. 41)	3	Physics B (p. 41)	4
					Additional requirement (p. 23)	6
	Elective.† (Choose Courses to Make a Total of 15 Hours.)		*Elective.*† (Choose Courses to Make a Total of 15 Hours.)			
	Latin B (p. 31)	3	‖English D (p. 32)	3		
	Greek B (p. 30)	3	Latin B (p. 31)	3		
	Greek G (p. 31)	3	Public Speaking B (p. 33)	2		
	Public Speaking B (p. 33)	2	Mathematics B (b) (p. 39)	3		
	Mathematics B (b) (p. 39)	3	Mathematics C (p. 40)	4		
	Mathematics D (p. 40)	2	Mathematics D (p. 40)	2		
	History A‡ (p. 39)	2	History A‡ (p. 39)	2		
	Astronomy B (p. 40)	3	Economics F (p. 37)	2		
	Economics F (p. 37)	2	Astronomy B (p. 40)	3		
	Bible (p. 47)	1	Bible (p. 47)	1		
	Biology A (p. 43)	3	Greek G (p. 31)	3		
	Biology C (p. 44)	3	Biology B or C (pp. 43, 44)	3		

* Both these subjects may be taken, or both may be omitted if the student takes Chemistry A in his Junior year.

† Courses continuing through the year may not be dropped at the half-year. They may, however, be entered at the second half with the consent of the instructor.

‡ History amounting to 2 hours for one year must be included in the student's course.

‖ A half-year of English Literature must be included at some time in the student's course.

OUTLINE OF COURSES—Continued.

Junior Year.	A. B. Course.	HRS.	Ph. B. Course.	HRS.	S. B. Course.	HRS.
First Half	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3
	Economics A (p. 37)	4	Geology A (p. 46)	3	Geology A (p. 46)	3
	Chemistry A* (p. 41)	3	Economics A (p. 37)	4	Additional requirement (p. 23)	3
	Electives (pp. 24–27)	5 or 8	Electives (pp. 24–27)	5	Electives† (pp. 24–27)	6
Second Half	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3	Philosophy A (p. 28)	3
	Chemistry A* (p. 41)	3	Geology A (p. 46)	3	Geology A (p. 46)	3
	Electives (pp. 24–27)	9 or 12	Electives (pp. 24–27)	9	Additional requirement (p. 23)	3
					Electives† (pp. 24–27)	6
Senior Year.						
First Half	Philosophy C (p. 29)	4	Philosophy C (p. 29)	4	Philosophy C (p. 29)	4
	Electives (pp. 24–27)	11	Electives (pp. 24–27)	11	Additional requirement (p. 23)	3
					Electives (pp. 24–27)	8
Second Half	Philosophy D (p. 29)	4	Philosophy D (p. 29)	4	Philosophy D (p. 29)	4
	Electives (pp. 24–27)	10	Electives (pp. 24–27)	10	Additional requirement (p. 23)	3
					Electives (pp. 24–27)	7

* Required only of students who have had neither Physics A nor Biology A in the Sophomore year.
† History amounting to 2 hours for one year must be included in the student's course.

ADDITIONAL REQUIREMENTS IN S. B. COURSE.

Course in Pure Mathematics and Astronomy.	HRS.	Course in Physics.	HRS.	Course in Biology.	HRS.	Course in Geology.	HRS.	Course in Chemistry.	HRS.
Sophomore Year.									
First Half.									
Mathematics B (a) (p. 39)	3	Mathematics B (a) (p. 39)	3	Biology B (p. 43)	3	Biology C (p. 44)	3	Mathematics B (a) (p. 39) or Astronomy A (p. 40)	3
Mathematics C (p. 40)	3	Mathematics C (p. 40)	3	Biology C (p. 44)	3	Geology B (p. 46)	3	Chemistry C (p. 42)	6
Second Half.									
Mathematics C (p. 40)	4	Mathematics C (p. 40)	4	Biology B (p. 43)	3	Biology C (p. 44)	3	Chemistry C (p. 42)	6
Mechanical Drawing	2	Mechanical Drawing	2	Biology C (p. 44)	3	Geology F (p. 47)	3		
Junior and Senior Years.									
Mathematics and Astronomy (pp. 39, 40)	3	Physics (p. 41)	3	Biology (p. 43)	3	Geology (p. 45)	3	Chemistry (p. 41)	3

ELECTIVE COURSES.

Unless otherwise stated, each Elective Course continues through the year. Not all the Electives will be given in any one year.

	HOURS PER WEEK.
Philosophy.—(p. 28.)	
B. *Psychological Seminary*	1
E. *Modern German Philosophy;* first half-year	2
F. *The Philosophical Movement in England;* second half-year	2
G. *Advanced Logic;* second half-year	2
H. *Lotze;* second half-year	2
I. *Seminary in Social Ethics;* second half-year	1
J. *Seminary in Greek Philosophy;* one half-year	1
K. *Evolution of Religious Thought;* second half-year	2
Pedagogy—(p. 30.)	
A. *History and Philosophy of Education;* first half-year	2
B. *School Hygiene and Child Study;* second half-year	2
C. *Original Observations*	1
D. *Pedagogical Seminary*	1
Greek.—(p. 30.)	
B. *Drama*	3
C. *History;* one half-year	3
D. *Philosophy;* one half-year	3
E. *Epic and Lyric Poetry;* one half-year	3
F. *Course for Teachers;* one half-year	3
G. *Greek Drama (in English);* second half-year	3
Latin.—(p. 31.)	
C. *Drama;* one half-year	3
D. *Catullus and the Elegiac Poets;* one half-year	3
E. *Satire;* one-half year	3
F. *Roman Life*	3
G. *Vergil;* one half-year	3
H. *Course for Teachers;* one half-year	3
English.—(p. 32.)	
E. *Early English Literature;* first half-year	3
F. *Middle English;* second-half year	3
G. *Chaucer and Spenser;* first half-year	3
H. *English Drama;* first half-year	3
I. *Shakespeare;* second half-year	3
J. *Shakespeare*	2
K. *Milton;* first half-year	3

ENGLISH.—*Continued.* HOURS PER WEEK.

L. *English Poetry from Pope to Burns;* first half-year..... 3
M. *Keats, Shelley, Byron, Coleridge, Wordsworth;* second half-year..... 3
N. *Tennyson and Browning;* first half-year..... 3
O. *Modern English Prose;* second half-year..... 3
P. *Old English;* first half-year..... 3
Q. *Béowulf;* second half-year..... 3
R. *Lyrics;* second half-year..... 2
S. *Outline History of English Literature;* second half-year 3
T. *Advanced Composition;* second half-year..... 2

PUBLIC SPEAKING.—(p. 33.)

B. *Oratory*..... 2
C. *Forensics;* first half-year..... 3
D. *Extempore Speaking;* first half-year..... 1

GERMAN.—(p. 33.)

C. *Schiller and Goethe;* first half-year..... 2
D. *Lessing and Goethe;* second half-year..... 2
E. *History of German Literature*..... 1
F. *The Nibelungenlied*..... 2
G. *Middle High German;* one half-year..... 3
H. *Gothic*..... 2
I. *Faust*..... 2
K. *Poetry of Goethe and Schiller*..... 2

FRENCH.—(p. 35.)

C. *Classic Period;* first half-year..... 2
D. *Nineteenth Century Literature;* second half year..... 2
E. *Molière*..... 2
F. *Critical Study of Classic Authors;* first half-year..... 2
G. *Lyric Poetry;* second half-year..... 2
H. *Old French*..... 2
I. *Conversation*..... 1

SPANISH.—(p. 36.)

A. *Elementary Course*..... 3
B. *Advanced Composition*..... 1
C. *Modern Spanish Literature*..... 2

ITALIAN.—(p. 36.)

B. *Literature of Thirteenth and Fourteenth Centuries*..... 2

	HOURS PER WEEK.
ECONOMICS.—(p. 37.)	
C. *Money and Banking;* first half-year	3
E. *Colonial Policy;* second half-year	2
I. *Economic Geography;* first half-year	2
F. *Economic History;* second half-year	2
G. *Public Finance;* second half-year	3
POLITICAL SCIENCE.—(p. 38.)	
A. *Historical Politics;* first half-year	3
B. *Comparative Politics;* second half-year	3
HISTORY.—(p. 39.)	
A. *English*	2
B. *American;* first half-year	2
B. *American;* second half-year	3
C. *The Napoleonic Era and Modern Times;* second half-year	2
MATHEMATICS.—(p. 39.)	
B. (*a.*) *Analytical Geometry* (elementary); first half-year	3
B. (*b.*) *Analytical Geometry* (more advanced); second half-year	3
C. *Calculus, Differential and Integral;* first half-year	3
C. *Calculus, Differential and Integral;* second half-year	4
D. *History and Logic of Mathematics;* one half-year	2
E. *Modern Methods in Geometry;* one half-year	3
F. *Theory of Equations;* one half-year	3
H. *Elements of Substitution Groups;* one half-year	3
I. *Elementary Surveying;* second half-year	3
J. *Theoretical Mechanics*	3
ASTRONOMY.—(p. 40.)	
A. *Descriptive Astronomy;* first half-year	3
B. *Observations and Computations;* second half-year	3
C. *Celestial Mechanics*	2
D. *Elementary Meteorology;* second half-year	3
PHYSICS.—(p. 40.)	
C. (*a.*) *Theoretical Physics*	2
C. (*b.*) *Theoretical Physics* (advanced)	2
D. *Practical Physics*	2
E. *Lectures on Advanced Physics*	1
F. *Seminary*	1
G. *Problem Work;* second half-year	2

	HOURS PER WEEK.
CHEMISTRY.—(p. 41.)	
C. *Qualitative Analysis;* first half-year	3
C. *Qualitative Analysis;* second half-year	6
D. *Quantitative Analysis*	4
E. *Organic Chemistry*	3
F. *Theoretical Chemistry*	3
G. *Medical Chemistry*	3
BIOLOGY.—(p. 43.)	
A. *General Biology*	3
B. *Botany*	3
C. *Zoology*	3
D. *Invertebrate Morphology;* first half-year	3
E. *Comparative Anatomy of Vertebrates;* second half-year	3
F. *Histology and Cytology;* first half-year	3
J. *Advanced Histology and Cytology;* second half-year	3
G. *Physiology;* first half-year	4
M. *Morphology of Scizophytes, Algœ and Fungi;* first half-year	3
N. *Morphology of Bryophytes, Pteridophytes and Spermatophytes;* second half-year	3
P. *Organic Evolution;* second half-year	2
GEOLOGY.—(p. 45.)	
A. *Inorganic and Organic Geology*	3
B. *Mineralogy*	3
C. *Advanced Mineralogy*	1
D. *Crystallography;* second half-year	2
E. *Economic Geology;* first half-year	3
I. *Special Economic Geology;* second half-year	3
G. *Vertebrate Palœontology;* second half-year	3
H. *Petrography;* first half-year	3
BIBLE STUDY.—(p. 47.)	
The Life of Christ	1
THEORY of MUSIC.—(p. 48.)	
*Harmony**	2
*Counterpoint**	2
*Composition**	2

A student for any degree is usually permitted to take as an elective any study required for another degree that does not appear in the course required for his own degree, and that does not introduce a conflict of hours.

*For the courses in Music an additional tuition will be charged. (See p. 48.)

DEPARTMENTS OF INSTRUCTION.

PHILOSOPHY.

President Slocum, Assistant Professor Lancaster.

The required work in this department extends over the whole of the Junior and Senior years, and gives the student a knowledge of the development of thought in the several departments of philosophy. The various Seminary courses afford training in the study and discussion of important psychological, sociological and ethical questions.

A. *Psychology.*—3 hours.

1. *Neurology.*—Lectures on the brain and nervous system, with careful dissections, by the class, of brains of animals, and study of the human brain. 8 weeks.—Dr. Lancaster.
2. *Animal Intelligence.*—Lectures, reading of Romanes, Morgan, Binet and others. A study of comparative neurology of animals, with a thesis by each member of the class on the nervous development of some species of animal, compared with the habits and environment of the same animal. 6 weeks.—Dr. Lancaster.
3. *Experimental Psychology.*—Lectures, recitations and experiments, based on Sanford's *Handbooks*. 4 weeks.—Dr. Lancaster.
4. *General Psychology and Logic.*—James' *Principles of Psychology, Briefer Course*, recitations, lectures, parallel readings and observations. Jevons' *Elementary Lessons in Logic.* Second half-year.—Dr. Lancaster.

   Lectures:

   (*a.*) Introductory Series.—President Slocum.

   (*b.*) Cerebral Localization and the Relation of Thought to Brain Activity. 4 lectures.
5. *Psychological Laboratory.*—Opportunity will be afforded for the conducting of experiments in special lines.

B. *Psychological Seminary.*—The leading subjects in Modern Psychology. Theses and Discussions. Study of the following subjects: The Relations of Mind and Body; Double Consciousness; Animal Psychology; The Psychology of Defectives; Mental Evolution in Man; Unconscious Cerebration; Diseases

of the Memory; Diseases of the Will; Dreams; The Psychology of Music; Hallucinations; Power of Suggestion; Aphasias; Muscle Memory; Psychology of Fear; Hypnotism; Sanity and Insanity, Genius. Each student is also required to select some one subject for independent study and investigation during the year. 1 hour.—Dr. Lancaster.

C. *History of Philosophy.*—First half-year, 4 hours.—President Slocum.

1. *Lectures, Recitations and Conferences.*—3 hours.
   (*a.*) Study in Comparative Religions.
   (*b.*) Greek Philosophy. 20 lectures.
   (*c.*) Modern Philosophy. 15 lectures. (1) The Rise and Fall of Scholasticism; (2) The Beginnings of Modern Philosophy—Bacon and Descartes; (3) Spinoza; (4) Locke; (5) The Sceptical Movement in France; (6) Leibnitz; (7) Berkeley; (8) Hume; (9)Kant, The Critique of Pure Reason; (11) Kant, The Transcendent Element in his Philosophy; (12) Hegel; (13) Schopenhauer; (14) Lotze; (15) Spencer—The Philosophy of Evolution.

2. *Metaphysical Seminary.*—1 hour.
   Presentation of papers and discussion of the following subjects:
   (*a.*) The Great Religions of the World.
   (*b.*) The Psychological Basis of Religious Faith.
   (*c.*) The Psychological Basis of Æsthetics.
   (*d.*) Philosophical Thought in England during the Nineteenth Century.
   (*e.*) Evolution: Its History, Development and Results.

D. *Ethics.*—Second half-year, 4 hours.—President Slocum.

1. *Janet's Theory of Morals.*—Lectures, theses and discussions. 3 hours.
   (*a.*) The Fundamental Principles of Ethics. 12 lectures.
   (*b.*) Christian Ethics. 3 lectures.

2. *Ethical Seminary.*—1 hour.
   Presentation of papers and discussions upon the following subjects:
   (*a.*) Modern Social and Sociological Problems.
   (*b.*) The Ethical View of Citizenship.
   (*c.*) A Study of Educational Theories from an Ethical Standpoint.

E. *Modern German Philosophy.*—First half of Senior year, 2 hours. —President Slocum.

F. *The Philosophical Movement in England.*—Second half of Senior year, 2 hours.—President Slocum.

G. *Advanced Logic.*—Second half year, 2 hours.—President Slocum.

H. *Lotze.*—Second half-year, 2 hours.—President Slocum.

I. *Seminary in Social Ethics.*—The Labor Question, Temperance, Pauperism and other social problems considered from an ethical standpoint. Second half-year, 1 hour.

J. *Seminary in Greek Philosophy.*—One half-year, 1 hour.

K. *Evolution of Religious Thought.*—Second half-year, 2 hours.—Mr. Hastings.

PEDAGOGY.

Assistant Professor Lancaster.

A. *History and Philosophy of Education.*—The recent educational developments in Europe and America. Study of educational reformers, school systems and curricula. Lectures, reading and conferences. First half-year, 2 hours.

B. *School Hygiene and Child Study.*—Hygiene of the senses, fatigue, child and adolescent psychology, problems of the school room and of practical teaching. Lectures, reading and discussion. Second half-year, 2 hours.

C. *Original Observations in Psychological and Pedagogical Fields of Study.*—1 hour.

D. *Pedagogical Seminary.*—Reports and discussions of research work.—1 hour.

Note.—Courses A, B and C may be taken by correspondence.

GREEK.

Professor Gile, Assistant Professor Noyes, Mr. Brehaut and Miss Park.

A. Homer, selections from the *Odyssey* and *Iliad* in the original and all the poems in translation; Plato, *Apology* and *Crito*; Herodotus, selections.—3 hours.

B. *Greek Drama.*—Æschylus, *The Septem* and *Prometheus;* Sophocles, *Antigone;* the remainder of Æschylus' and Sophocles' plays in translation: Euripides, *Alcestis* and *Medea.*—3 hours.

C. *Greek History.*—(*a.*) Herodotus: careful study of the period of the Persian Wars. Reading from the dramatists for further illustration of the life of the period; or, (*b.*) Thucydides, the Sicilian Expedition. Parallel readings in Curtius, Grote and other modern historians. Selections from Plutarch's Lives. One half-year, 3 hours.

D. *Greek Philosophy.*—Plato, *Phaedo.* Selections from other dialogues, and from the works of Xenophon. Zeller's *Socrates and the Socratic Schools.* One half-year, 3 hours.

E. *Greek Epic and Lyric Poetry.*—Homer, Hesiod and Pindar. One half-year, 3 hours.

F. *A Course Designed for Teachers.*—Selections from Xenophon: composition; careful grammatical study. One half-year, 3 hours.

G. *Greek Drama for English Readers.*—Literary study of Æschylus and Sophocles in poetic translation; lectures on the Greek Theatre and on Greek Art. Second half-year, 3 hours.

LATIN.

PROFESSOR GILE, MR. BREHAUT AND MISS PARK.

A. Livy, *Bk. XXII;* Cicero, *De Senectute, De Amicitia;* Pliny, *Selected Letters;* Horace, *Odes.*—3 hours.

B. Horace, Selections from the *Epistles* and *Satires;* Tacitus, *Germania* and *Agricola;* Terence, *Phormio;* Plautus, *Captivi;* Cicero, *Selected Letters.*—3 hours.

C. *Drama.*—Selected plays of Plautus and Terence; history and characteristics of the Roman Drama. One half-year, 3 hours.

D. *Catullus and the Elegiac Poets.*—One half-year, 3 hours.

E. *Satire.*—History and characteristics of Roman Satire. Selections from Horace, Persius, Petronius, Juvenal. Parallel readings in English Literature. One half-year, 3 hours.

F. *Roman Life.*—Manners, morals, politics and religion under the late Republic and the Empire. Cicero, *Selected Letters;* Petronius, *Cena;* Pliny, *Selected Letters;* Martial, *Selected Epigrams;* reports on special topics.—3 hours.

G. *Vergil.—The Aeneid*, Books VII–XII; the *Bucolics*, and Selections from the *Georgics.* One half-year, 3 hours.

H. *A Course Designed for Teachers.*—Selections from Cæsar and Cicero; composition; careful grammatical study. One half-year, 3 hours.

ENGLISH.

PROFESSOR PARSONS, ASSISTANT PROFESSOR NOYES, MR. PATTISON.

B. *Rhetoric and Composition.*—Elementary course.—3 hours.

C. *Forms of Composition.*—Prerequisite, Course B. First half-year, 3 hours.

T. *Advanced Composition.*—Prerequisite, Course C. Second half-year, 2 hours.

D. *American Literature.*—Irving, Cooper, Poe, Bryant, Hawthorne, Longfellow, Emerson, Lowell, Holmes, Whittier. Alternate with Course S. Second half-year, 3 hours. (Not given in 1903–04.)

E. *Early English Literature.*—A rapid survey, from the Anglo-Saxon Conquest to Chaucer. First half-year, 3 hours.

F. *Middle English.*—A study of the development of the English language and literature in the twelfth and thirteenth centuries. Second half-year, 3 hours.

G. *Chaucer and Spenser.*—The principal poems read critically in class. Life and thought of the times. First half-year, 3 hours.

H. *The English Drama: Through Marlowe.*—Principles and development. First half-year, 3 hours.

I. *The English Drama: Shakespeare.*—The principal plays read chronologically. Second half-year, 3 hours.

J. *Shakespeare.*—A critical text study of three dramas of Shakespeare. The class meets once a week for a two-period session. PROFESSOR AHLERS.

K. *Milton.*—A comprehensive study of the poet's personality and work. First half-year, 3 hours.

L. *English Poetry from Pope to Burns.*—First half-year, 3 hours.

M. *Keats, Shelley, Byron, Coleridge, Wordsworth.*—Second half-year, 3 hours.

N. *Tennyson and Browning.*—First half-year, 3 hours.

O. *Modern English Prose.*—Dryden to Ruskin. Second half-year, 3 hours.

P. *Old English.*—The beginnings of English Literature. Reading is begun at once and the study is made as literary in character as possible. First half-year, 3 hours.

Q. *Old English.*—Béowulf. Course P. prerequisite. Second half-year, 3 hours.

R. *Lyrics.*—Second half-year, 2 hours.

S. *Outline History of English Literature.*—Alternate with Course D. Second half-year, 3 hours.

NOTE.—For a course in Greek Drama for English readers, see Greek G.

PUBLIC SPEAKING.

MR. RITCHIE.

A. *Declamation.*—One declamation to be prepared and delivered in each half-year. Required of all Sophomores.

B. *Oratory.*—(1) An analytical study of the life and speeches of noted orators; (2) the memorizing and delivery of selections; (3) the study of contemporary orators; (4) the preparation and delivery of two orations. 2 hours.

C. *Forensics.*—The nature of evidence, argumentation, brief drawing, and the delivery of argument. Members of this course will be required to report legal trials. First half-year, 3 hours.

D. *Extempore Speaking.*—Current topics are discussed. Emphasis is laid upon clearness, force and precision of statement. First half-year, 1 hour.

GERMAN LANGUAGE AND LITERATURE.†

PROFESSOR AHLERS.

A. *Elementary Course.*—Joynes-Meissner's *Grammar.* Andersen, *Maerchen*, Storm, *Immensee;* Hauff, *Das kalte Herz; Die Karavane;* Eichendorff, *Aus dem Leben eines Taugenichts.* 3 hours.

B. *Intermediate Course.*—Riehl, *Fluch der Schoenheit;* Jensen, *Die Braune Erica;* Chamisso, *Peter Schlemihl;* Heine *Harzreise;* Gerstaecker, *Germelshausen;* Lessing, *Minna von Barnhelm;* Schiller, *Wilhelm Tell*, *Lyrics* and *Ballads.* Dictation. Von Jagemann's *Prose Composition and Syntax.* 3 hours.

C. Schiller, *Maria Stuart, Die Jungfrau von Orleans;* Goethe, *Egmont;* Sime's *Life of Goethe.* Dictation. First half-year, 2 hours.

D. Lessing, *Emilia Galotti, Nathan der Weise;* Rollestone's *Life of Lessing;* Goethe, *Iphigenie.* Dictation. Second half-year, 2 hours.

† Authors and books designated under German A, B, C and D indicate the scope rather than the actual works read in these courses.

E. *Outline History of German Literature.*—This course is conducted in English, and is open to all College students, whether they are taking German or not. Kuno Francke's *Social Forces in German Literature* will be used as text-book. This reading will be supplemented by twelve lectures. 1 hour.

F. The *Nibelungenlied* and the Classic Period of the Twelfth Century. *Hartmann von Aue Wolfram von Eschenbach, Gottfried von Strassburg.* Lectures and collateral reading. 2 hours.

G. *Middle High German.*—Braune-Paul's *Mittelhochdeutsche Grammatik; Nibelungenlied; Kudrun; Walter von der Vogelweide.* One half-year, 3 hours; a fourth hour at the discretion of the instructor.

H. *Gothic.*—Braune's *Gotische Grammatik;* Heyne's *Ulfilas.* 2 hours.

I. *The Faust Legend and Its Development, and Goethe's Faust.*—Synopsis of the Course:

CHAPTER I. Kindred Legends before the 16th Century. (*a.*) Simon Magus. (*b.*) Ahasuerus. (*c.*) Anthemios, Proterius and Theophilus. (*d.*) Cyprianus Antiochus. (*e.*) Tannhaeuser and Don Juan.

CHAPTER II. The historic Faust; the "Faustbuch" of 1587 and its development; the "Puppenspiele."

CHAPTER III. Faust Dramas before the 18th Century.
(*a.*) Calderon's El Magico Prodigioso.
(*b.*) Marlowe's Tragical History of Dr. Faustus.

CHAPTER IV. Faust in the 18th Century.
Lessing's Fragment: Maler Mueller, Klinger, etc.

CHAPTER V. Goethe's Faust.
(*a.*) the "Urfaust."
(*b.*) Faust, Part I, 1808.
(*c.*) Faust, Part II.

This course is conducted entirely in German. The class meets once a week for a 2-hour period.

K. *The Poems of Goethe and Schiller.*—This course is conducted entirely in German. The class meets once a week for 2 hours.

FRENCH LANGUAGE AND LITERATURE.

PROFESSOR AHLERS AND ASSISTANT PROFESSOR SMITH.

A. *Elementary Course.*—Fraser and Squair's *French Grammar;* Rollin's *Reader;* Malot, *Sans Famille;* Dumas, *La Tulipe Noire;* Erckmann-Chatrian, *Madame Thérèse.* Prose composition based on Daudet's *La Dernière Classe.* Sight reading. 3 hours.

B. *Intermediate Course.*—Modern fiction and plays. Much ground is covered, and especial attention paid to pronunciation. The class is conducted partly in French. Some of the books read are: Sand, *La Mare au Diable;* About, *Le Roi des Montagnes;* Hugo, *Bug Jargal;* Merimée, *Colomba;* Gréville, *Dosia;* Molière, *Le Médecin Malgré Lui;* Corneille, *Le Cid;* Racine, *Athalie.* Composition based on *Le Siège de Berlin* and *Colomba.* 3 hours.

C. *Classic Period.*—Representative plays of the great classical dramatists are read. Much reading is done; very little translation. Students do outside reading and hand in written reports. A series of lectures on the history of the French theatre is given. This course is conducted largely in French. First half-year, 2 hours.

D. *Nineteenth Century Literature.*—A series of lectures on the development of Romanticism in French Literature; some of the plays read are: Hugo, *Hernani, Ruy Blas;* two comedies of de Musset; de Bornier, *La Fille de Roland;* Rostand, *Cyrano de Bergerac.* Second half-year, 2 hours.

I. *Conversation.*—The course is designed to give as much training as possible in understanding and speaking the language. Some short stories will be read and reported in French, but most of the time will be given to the use of the expressions heard in every-day life. The course may be taken as a supplementary hour to C and D, but is open to other students of similar preparation. 1 hour.

E. *Comedies of Molière.*—The more important comedies of Molière will be read by the instructor. Lectures on Molière and his time. Students desiring this course must consult the instructor. Two consecutive hours each week. PROFESSOR AHLERS.

F. *Critical Study of Classic Authors.*—Last year Bossuet and Pascal were studied. Duval's *Histoire de la Littérature Française*

is used as a basis for a review of literature. Outside reading, and written reports in French. Course conducted in French. First half-year, 2 hours.

G. *French Lyric Poetry.*—Study of its development, versification, and forms. Course conducted in French. Second half-year, 2 hours.

H. *Old French.*—Clédat's *Chrestomathie du Moyen-Age* and part of *Aliscans* and *Raoul de Cambrai* will be read. The elementary principles of French phonetics will be given. For conditions of admission, see instructor. 2 hours.

SPANISH.

Associate Professor Hills.

A. *Elementary Course.*—Hills and Ford's *Spanish Grammar;* Matzke's *First Spanish Readings;* Alarcón, *El Capitán Veneno;* Echegaray, Ó locura ó santidad; Galdós, *Dona Perfecta.* Elementary prose composition, writing from dictation, and practice in conversation. 3 hours. Students are not permitted to elect Spanish A and Italian A in the same year.

B. *Advanced Prose Composition and Syntax.*—Hills and Ford's *Spanish Grammar;* Ford's *Spanish Composition.* Social and commercial correspondence. 1 hour.

C. *Modern Literature of Spain and Spanish-America.* First half-year. Selections from the prose writers of the Nineteenth Century. Second half-year. Ford's *Spanish Anthology;* Hills' *Bardos Cubanos.* Lectures and collateral reading. 2 hours.

D. *Spanish Literature of the Sixteenth and Seventeenth Centuries,* with an especial study of Cervantes, Lope de Vega, and Calderon. Lectures and collateral reading. 2 hours. (Not given in 1903–1904. To be given in alternate years.)

ITALIAN.

Associate Professor Hills.

A. *Elementary Course.*—Grandgent's *Italian Grammar;* Bowen's *Italian Reader;* Goldoni, *Il vero amico;* Manzoni, *I promessi sposi.* 2 hours. (Not given in 1903-1904. To be given in alternate years.)

B. *Italian Literature of the Thirteenth and Fourteenth Centuries,* with an especial study of Petrarca and Dante. Lectures and collateral reading. 2 hours.

ECONOMICS.

Professor Urdahl.

A systematic course in the elements of Political Economy, required of all students, is followed by elective courses in special subjects. Course A is a prerequisite to any of the electives except F, I and J.

A. *Elements of Political Economy.* Required of Juniors. Text: Ely's *Outlines of Economics.* First half-year, 4 hours.

B. *Charities and Corrections.*—The theory and history of charity and reformatory work. Students are encouraged to study the charitable and correctional institutions in the vicinity of their own homes. Text: Warner's *American Charities.* If possible, additional lectures by men who have devoted special attention to some phase of these subjects. Second half-year, 3 hours. (Not given in 1903-04.)

C. *Money and Banking.*—An historical and theoretical course in money and banking, treating especially the production of the precious metals, the theory of value, the history of prices, bimetallism, paper money, bank notes, etc. Lectures, recitations, reports and discussions. Text: Scott's *Money and Banking.* Alternate with Course D. First half-year, 3 hours.

D. *Socialism.*—An historical and critical course in socialism and socialistic theory. Especial attention is paid to the historical basis of socialism, the French Revolution, the idealists, the German scientific socialists, the Christian socialists, the State socialism of to-day, and also to the various attempts at socialistic reforms. Lectures and recitations. Text: Ely's *French and German Socialism.* First half-year, 3 hours. (Not given in 1903-04.)

E. *Colonial Policy.*—The theories of colonization and the economic ideas and institutions underlying the modern expansionist movement; a brief history of the colonial experiments of the great colonizing nations of the world: Spain, Portugal, Holland, France, England and Germany. Lectures supplemented by outside reading. Second half-year, 2 hours.

F. *Economic History*—The industrial History of England. Open to Sophomores. Introductory to Course A, though not prerequisite. Second half-year, 2 hours.

G. *Public Finance.*—Taxation, public expenditure, public debts and the budget. Lectures with collateral reading. Text: Adam's *Finance.* Second half-year, 3 hours.

H. *History of Economic Theory.*—Special emphasis is laid on the theories of rent, wages and profits. Lectures, collateral reading and reports. Second half-year, 2 hours. (Not given in 1903–04.)

I. *Economic Geography.*—Elementary course. First half-year, 2 hours.

J. *Economic and Social History of the United States.*—Alternate with History B. 2 hours. (Not given in 1903–04.)

POLITICAL SCIENCE.

PROFESSOR URDAHL.

A. *Historical Politics.*—The origin and growth of government from its primitive forms to the establishment of the modern states, the semi-amorphous horde, gentile society, the ancient city, the Athenian Democracy, the Greek Confederations, the Roman Republic and Empire, the Germanic folk, the feudal system, the political system of the Church, the Holy Roman Empire, the rise of national states, the development of absolute and constitutional monarchy, the growth of democracy, etc. Lectures supplemented by recitations and reports. Text: Wilson's *State.* First half-year, 3 hours.

B. *Comparative Politics.*—A study and comparison of the governments of the chief modern States; an exposition of the constitutional law of the United States and England and of their actual political organization. The great problems of federalism and centralization, presidential and responsible ministerial government, colonial government and civil liberty, receive especial consideration. Lectures, recitations and collateral reading. Text: Bryce's *American Commonwealth.* Second half-year, 3 hours.

C. **Elementary Law.*—The leading principles of law and their practical application. Alternate with Course A. First half-year, 3 hours. (Not given in 1903–04.)

D. **American Constitutional Law.*—The theory and practical working of the Federal Constitution; recent changes and present tendencies. Reading, lectures and leading cases. Alternate with Course B. Second half-year, 3 hours. (Not given in 1903–04.)

E. **International Law.*—Second half-year, 2 hours. (Not given in 1903–04.)

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*Other preliminary courses in law, definite announcement of which will be made later, will be offered in 1903–04.

HISTORY.*

PROFESSOR URDAHL.

A. *English History.*—The Political history of England from the earliest times to the American Revolution. Recitations and collateral reading, supplemented by lectures on the constitutional and economic development. Text: Gardiner's *Student's History of England.* 2 hours.

B. *American History.*—A general survey, with emphasis on political history. Course A is recommended as a preparation. In special cases the course may be elected for one half-year.

(*a.*) First half-year: To the close of the Revolution. 2 hours.

(*b*) Second half-year: From the Revolution to the present time. 3 hours.

C. *The Napoleonic Era and Modern Times.*—The history of Western Europe in the nineteenth century. Second half-year, 2 hours.

D. *Modern European History to the French Revolution.*—Alternate with Course C. Second half-year, 2 hours. (Not given in 1903–04.)

*See also Political Science A (*Historical Politics*) and Economics F (*English Industrial History*). History amounting to two hours a week for one year is required of each student.

MATHEMATICS.

PROFESSOR CAJORI AND PROFESSOR LOUD.

A (*a.*) *Algebra.*—Series; The Binomial Theorem; Logarithms; Undetermined Coefficients; Theory of Equations. 4 hours till Christmas.

A (*b.*) *Solid and Spherical Geometry.*—Planes and lines in Space; Polyhedra, the Cylinder, Cone and Sphere; Spherical Triangles. Second half-year, 2 hours.

A (*c.*) *Plane Trigonometry.*—The functions of one and two angles; the solution of triangles; simple applications. 4 hours during January. Second half-year, 2 hours.

A (*d.*) *Spherical Trigonometry.*—Second half-year, 2 hours.

B (*a.*) *Analytical Geometry* (*Elementary*).—Plane Loci of first and second order. First half-year, 3 hours.

B (*b.*) *Analytical Geometry* (*More Advanced*).—More thorough study of plane loci, some attention being given to modern methods. Second half-year, 3 hours.

C. *Calculus, Differential and Integral.*—First half-year, 3 hours; Second half-year, 4 hours.

D. *History and Logic of Mathematics.*—This course is planned especially for those who are fitting themselves to be teachers of Mathematics. One half-year, 2 hours.

E. **Modern Methods in Geometry.*—One half-year, 3 hours.

F. **Theory of Equations.*—One half-year, 3 hours.

H. **Elements of Substitution Groups.*—One half-year, 3 hours.

J. **Theoretical Mechanics.*—4 hours.

I. *Elementary Surveying.*—Field work and computation. Fee, $2. Second half-year, 3 hours.

*Of Courses E, F, H and J, only two are given in any one year.

ASTRONOMY.

PROFESSOR LOUD.

A. *Elementary Astronomy.*—The descriptive, rather than the mathematical side of Astronomy, is emphasized. Text: Young's *Manual of Astronomy.* Essays are required. First half-year, 3 hours.

B. *Observations and Computations.*—Prerequisite, Mathematics A (*c*). Astronomy A is recommended in preparation. The student is expected to make free use of the telescope and transit instrument, and to use his observations in the solution of simple problems. Second half-year, 3 hours (including the observatory work counted as laboratory periods.)

C. *Celestial Mechanics.*—The work of Moulton is used as a textbook. Prerequisite, Differential and Integral Calculus. 2 hours. First half-year or throughout the year.

D. *Elementary Meteorology.*—Prerequisite, Elementary Physics. Text: Davis's *Elementary Meteorology.* Second half-year, 3 hours.

PHYSICS.

PROFESSOR SHEDD.

ELEMENTARY COURSES.—Prerequisite, one year's *Preparatory Physics* and *Plane Trigonometry.*

A. *General Physics.*—Lectures, Recitations and Laboratory Work. 3 hours.

First half-year: Mechanics of solids, liquids and gases; Light.

Second half-year: Magnetism, Electricity, Sound, Heat.

B. Same as Physics A with additional laboratory work. 4 hours.

ELECTIVE COURSES.—

G. *Problem Work.*—Second half-year, 2 hours. Open to S. B. Freshmen and students in Course A or B. Prerequisite: one year's Preparatory Physics.

C. (*a.*) **Theoretical Physics.*—2 hours.

First half-year: Theory of Heat.

Second half-year: Theory of Light.

C. (*b*). **Theoretical Physics.*—2 hours.

First half-year: Theory of Electricity and Magnetism.

Second half-year: Applications to Electromagnetic Machinery, or Elements of Alternating Currents.

D. †*Practical Physics.*—Laboratory work: Determination of Physical Constants in Mechanics, Heat, Electricity and Magnetism. Problems in Light and Sound. 2 hours.

E. *Lectures on Advanced Physics.*—Prerequisite, The Calculus. 1 hour,

First half-year: Physical Constants and Instruments of Precision.

Second half-year: Magnetism and the Magnetic Circuit.

F. Seminary of Current Literature. 1 hour.

In Courses A and B a fee of $1.00 per half-year for each hour's credit will be charged. In Course D no laboratory fee will be charged except in case of material consumed.

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* Courses C (a) and C (b) will not be given the same year.
† Course D may be taken only with Courses C (a) or C (b).

CHEMISTRY.

PROFESSOR STRIEBY AND MR. COOLBAUGH.

A. *Elementary Chemistry.*—Text-book work (chiefly Inorganic Chemistry) supplemented by lectures and discussions upon

the fundamental laws, the application of chemistry to sanitary science, medicine and some of the arts, and also by occasional papers from descriptions in technical books, and by reports of visits to metallurgical and manufacturing establishments. Remsen's *College Chemistry.* 3 hours' recitation and 4 hours' laboratory work (counts 3 hours).

B. *Advanced Chemistry.*—This course gives a general knowledge of chemistry. The second term is devoted mainly to Organic Chemistry. The chief theories and laws are studied with reference to the explanation of chemical phenomena. The practical application of chemistry in the arts, and its uses in the sanitary regulation of daily life and work, are brought prominently forward. Abstracts from books on chemical technology and sanitary science and discussions upon recent discoveries and applications of chemistry will occasionally take the place of the usual recitation. The work in the laboratory comprises short courses in Qualitative and Quantitative Analysis and the preparation of inorganic and organic compounds. 3 hours' recitation or lectures and 4 hours of laboratory work (counts 3 hours.)

C. *Qualitative Analysis.*—Prerequisite, Chemistry A or equivalent. Experimental drill in obtaining characteristic reactions of the more common elements, study of empirical formulæ and symbolic expression of reactions, solution of substances, separation of groups of elements, and finally analysis—first of simple salts and later of complex mixtures. The analytical work is confined almost wholly to inorganic substances, but includes certain common organic acids and a few organic bodies of general and medicinal use. 9 hours (counts 4.)

D. *Quantitative Analysis.*—Prerequisite, Chemistry C. The laboratory work comprises determinations of single elements by approved methods, gravimetric and volumetric, followed by the analysis of selected salts, ores, slags, mineral water and commercial products. A few rapid or commercial determinations are given as the final work. The lectures treat of the methods of analysis, properties of precipitates, stoichiometry, sampling, reporting and the theory of solutions. The laboratory work occupies 3 consecutive hours 4 days a week (counts 4 hours). Cairn's *Quantitative Analysis.*

E. *Organic Chemistry.*—Prerequisite, Chemistry A or B. Remsen's *Organic Chemistry.* Lectures and discussions of special

subjects and processes. 3 hours' recitation and 3 hours' laboratory work (counts 3 hours.)

F. *Theoretical Chemistry.*—Prerequisite, Chemistry B. Text-book work with lectures and oral and written discussions. 3 hours.

G. *Medical Chemistry.*—Prerequisite, Chemistry B. Lectures, text book, assigned reading and laboratory work. Study is given mainly to substances, inorganic and organic, that are of importance in medical science and hygiene. Especial attention is devoted to the analysis of urine, water, milk, metallic poisons, and the use of disinfectants. The needful gravimetric determinations, considerable volumetric work with burettes and standard solutions, and microscopic and spectroscopic tests, supplement the usual qualitative examinations. 3 hours' recitation, 4 hours' laboratory work (counts 3 hours.)

The fee for every course must be paid in advance. It covers the cost of gas, chemicals and non-returnable supplies, except platinum. Glassware and necessary apparatus (except platinum vessels) are loaned to the student and must be returned in good condition. The fees are as follows:

Academy Course	$6 00
Course A	7 00
Course B	8 00
Courses C, D, E and G, each	15 00

BIOLOGY.

Mr. Shantz.

A. *General Biology.*—Prerequisite, Chemistry. 6 hours (counts 3 hours.)

First half-year:—Plants: cytology, physiology, morphology and relationships of the representative forms of Schizophyta, Algae, Fungi, Bryophyta, Pteridophyta and Spermatophyta; development of function and structure, evolution of sex and evolution of the sporophyte.

Second half-year:—Animals: development from lower forms to higher; embryology of the frog; the theory of evolution and other general biological questions. Laboratory work with lectures and assigned readings.

B. *Botany.*—Prerequisite, Course A. Designed to afford a comprehensive knowledge of the plant kingdom, including its morphology, histology, physiology, ecology and evolution.

Laboratory and field work with lectures and assigned readings, 6 hours (counts 3 hours.)

C. *Zoology.*—Prerequisite, Course A. General course: representative forms of the main groups; anatomy, classification, life history, distribution and habits of the various types; development of function and structure; evolution of the various systems; general biological questions. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

D.* *Invertebrate Morphology.*—Prerequisite, Course C. Representative types of invertebrate animals. First half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

E.* *Comparative Anatomy of Vertebrates.*—Prerequisite, Course C. Amphioxus, Cyclostomes, Fishes, Amphibians, Reptiles and Birds. Second half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

F.* *Histology and Cytology.*—Prerequisite, Course A. The principles and methods of killing, fixing, embedding, sectioning, staining, mounting, etc.; study of cells, tissues and organs. First half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

J.* *Advanced Histology and Cytology.*—Course F continued. Second half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

G.† *Physiology.*—Prerequisites, Biology A, Chemistry B and Physics A. The different systems and special senses; metabolism and transformation of energy. First half-year. Laboratory work with lectures and assigned readings, 8 hours (counts 4 hours.)

H.† *Embryology.*—Prerequisite, Course C. The development of the chick, comparative work on frog and mammalian embryoes; instruction in the preparation of mounts, killing, fixing, staining, etc. Second half-year. Laboratory work with lectures and assigned readings, 8 hours (counts 4 hours.)

K.† *Plant Histology and Cytology.*—Prerequisite, Course B. Methods of killing, fixing, embedding, sectioning, staining, etc.; a study of the cell; karyokinesis; tissues and tissue aggregates. First half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

L.† *Plant Physiology.*—Prerequisites, Biology B, Chemistry B and Physics A. The general functions of the organs of seed

plants. Second half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

O.† *Mammalian Anatomy.*—Prerequisite, Course C. The anatomy of the cat. First half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

M.* *Morphology of Schizophytes, Algae and Fungi.*—Prerequisite, Course B. Morphology, classification and genetic relationships. First half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

N.* *Morphology of Bryophytes, Pteridophytes and Spermatophytes.*—Prerequisite, Course B. A continuation of Course M; alteration of generations, heterosporey, seed production and genetic relationships. Second half-year. Laboratory work with lectures and assigned readings, 6 hours (counts 3 hours.)

P.* *Organic Evolution.*—Prerequisite, Course A. A study of the theory of evolution based on Darwin, Wallace and later writers. Lectures and assigned readings. Second half year, 2 hours.

Q.† *Plant Ecology.*—Prerequisites, Courses L, M, N. Field study of the earth's cover with occasional laboratory exercises; evolution of form and habit in adaptation to environment; plant succession. Second half-year, 2 hours.

The laboratory fees are as follows:

Courses A, B, J, L, M, N, each	$2 00
Courses F, G, K, each	2 50
Courses C, D, E, H, each	3 00
Course O.	1 50
Course Q	1 00

*Courses D, E, F, J, M, N and P will be offered in 1903-04 and in alternate years.

†Courses K, L, H, G, O and Q will be offered in 1904-05 and in alternate years.

NOTE.—Graduates of Colorado College who intend to study medicine, may obtain credit for the first year's work in any one of several medical schools of good standing, if they have taken the following courses: Physics A, Chemistry B and G, Biology A, B, C, D, E, F, G, H, I and O.

GEOLOGY.

PROFESSOR CRAGIN.

The study of Geology is peculiarly attractive in the vicinity of Colorado Springs. Few localities present strata of so many geological ages or so varied an assemblage of rock and mineral species.

Fossils of systems as early as the Cambrian and as late as the Quaternary occur within a radius of six miles from the College. Veins, dikes, faults, caves, flood-plains, river erosion, sand carving and the results of organic and glacial action are all well illustrated near at hand. To this wealth of geological illustration the College Museum and a collection of lantern slides add many specimens and views.

A. *Geology.*—Prerequisite for the first half-year: Elementary Chemistry; and for the second, Biology or Zoology. Recitations, special exercises and excursions to points of geological interest. In the first half-year, Dynamical, Structural and Physiographical Geology are studied; in the second, Historical Geology. Text: Scott's *Introduction to Geology*, supplemented by Le Conte, Dana, Geikie, Prestwich, etc. Students in Structural Zoology or an allied science, who are looking forward to Geology as one of their future studies, and wish to make the best preparation for it, should give as much attention as possible to the comparative or systematic side of their subject. By electing Mineralogy before Geology, a material advantage may be secured. 3 hours.

B. *Mineralogy.*—Advised for students who intend to elect any of the other branches of Geology along inorganic lines. This course is planned first of all to be practical. The *economic* or *ore classification* of minerals is used, and the time is devoted chiefly to laboratory work in Descriptive and Determinative Mineralogy. Only enough Crystallography is given to enable the student to understand the general relations of crystals and apply the terms of form and cleavage used in determinative tables. Text-books: Moses and Parsons' *Mineralogy, Crystallography and Blowpipe Analysis* and Crosby's *Tables for the Determination of Common Minerals.* Reference books: Dana's *Text-book of Mineralogy*, Cornwall's *Blowpipe Analysis*, Brush and Penfield's *Determinative Mineralogy*, etc. There is a laboratory fee of three dollars, covering use of gas, minerals and certain other supplies. Uniform individual working outfits are furnished at cost. 3 hours.

C. *Advanced Mineralogy.*—Prerequisite, Geology B. A laboratory course continuing Course B. Text and Reference books: those of *Geology B* and Dana's *System of Mineralogy, Supplement*, etc. Laboratory fee, one dollar. 1 hour.

D. *Crystallography.*—Recitations and laboratory work. Text: Williams' *Elements of Crystallography*, supplemented by the crys-

tallographic part of Brush and Penfield's *Determinative Mineralogy.* Second half-year, 2 hours.

E. *Economic Geology.*—Prerequisite, Geology A (Mineralogy is desirable). Recitations, examination of useful minerals and rocks, and of products derived from them; visits to geological localities of especial economic interest, and to industries based on geological resources; preparation of papers and discussions upon assigned topics. Text: Tarr's *Economic Geology of the United States.* First half-year, 3 hours.

I. *Special Economic Geology.*—A study of gold mines and mining. Text: Curle's *Gold Mines of the World* and Kemp's *Ore Deposits of the United States.* Second half-year, 3 hours.

F. *Invertebrate Palæontology.*—Prerequisite, Zoology. Recitations and laboratory study of fossils of principal groups, preceded in part by a study of recent forms of the same or allied groups. Text: Zittel's *Text-book of Palæontology, Volume I.* The student is guided in the use of other important literature on the subject. Second half-year, 3 hours. (Not given in 1903-04.)

G. *Vertebrate Palæontology.*—Prerequisite, Zoology. Recitations and laboratory studies in the Comparative Osteology, Taxonomy, and Evolution of the Vertebrata. The student makes use of the general works and monographs of Reynolds, Zittel, Huxley, Cuvier, Leidy, Cope, Marsh, Osborn, Scott, etc. Second half-year, 3 hours.

H. *Petrography.*—Prerequisites, Mineralogy, Crystallography and Physics. An elementary course in the Microphysiography of Rock-Components. Recitations and laboratory work. Text: Luquer's *Minerals in Rock Sections.* First half-year, 3 hours.

BIBLE STUDY.

PROFESSOR PARSONS.

Open as an elective to Juniors and Seniors. Freshmen and Sophomores having time to take the work will be allowed advanced credit on Junior and Senior electives. Academy students may enter the class, but will receive no credits. 1 hour a week.

The following courses are offered in successive years:

I. Introduction to the Books of the New Testament.
II. The Life of Christ (2 years).
III. Old Testament Literature.
IV. The Life of Paul.

In 1903-04 the class will study Course II.

MUSIC.

For such students as may desire courses in Music, the following are provided: Piano, organ, violin, mandolin, voice, harmony, counterpoint and composition. Of these, only harmony, counterpoint and composition are counted towards a degree. Courses in Music are not included in the regular tuition fee, but are charged for as follows:

By the term of four months (coinciding with the College half-year) payable in advance; two lessons a week.

CLASS LESSONS, ONE HOUR LONG.

Piano-forte, violin, voice, each	$25 00
Harmony	12 00
Counterpoint	18 00
Composition	22 50

PRIVATE HALF-HOUR LESSONS.

Piano-forte, violin, voice, organ, each	$35 00
Rent of Piano, one hour each day, by the term	3 00
Rent of Piano, two hours each day, by the term	5 00
Rent of Piano, each additional hour, by the term	2 00
Rent of two-manual organ 1 hour each day, by the term	5 00

Students of Music register with the Dean of the College. They will be accepted only on payment of a full term's tuition. No deduction will be made for absence from lessons, except on account of prolonged illness.

PHYSICAL TRAINING.

The peculiar climate of Colorado Springs and its charming surroundings make outdoor sports possible and attractive throughout the year. Tennis is played throughout the winter, and baseball practice is begun as soon as the football season is over. A gymnasium, heated by steam and furnished with shower baths, lockers, etc., serves for indoor exercises.

Football, baseball and basket-ball are managed by the Colorado College Athletic Association. The interests of the Association are controlled by a Board, consisting of Professors Ahlers and Smith, Mr. Coolbaugh, Messrs. P. B. Stewart, Jas. P. Shearer, C. H. Mallon and nine representatives from the College, including the Captains and Coaches of the teams. Mr. P. B. Stewart is President of the Board.

In 1898 the Athletic Association built, at large expense, a fine athletic park. For this purpose, the natural amphitheatre in the rear of the College buildings, facing the mountains, was used. About five

acres of ground were leveled and enclosed by an eight-foot fence, and a fine grand stand, with a seating capacity of 600, was erected. In 1900 a grand stand, seating 800, was given by Mr. Jas. F. Burns. For adaptation to its purposes, there is no more complete and satisfactory park in the West; for situation and beauty of its surroundings, it is probably unrivalled in the world.

Within fifteen minutes' walk of the College is a fine golf club, of which College students may become members. The delightful open winters of Colorado Springs make it possible to enjoy this excellent sport throughout the year.

THE MASTER'S DEGREE.

The Master's degree is conferred subject to the following conditions:

(1) The applicant must have received the Bachelor's degree from some reputable College or University.

(2) If the applicant becomes a resident student of Colorado College, he must pursue a minimum course of six hours per week for one year, two-thirds of the work being in one department. In addition, he must present a satisfactory thesis on a subject approved by the Faculty, such thesis to represent one-half of the requirement for the degree.

(3) In case of non-residence, the applicant must complete a minimum requirement equivalent to ten hours of lectures per week for one year, of which the equivalent of seven hours must be in one department, and at least two academic years must elapse before the degree is conferred. A thesis is required, as in the case of the resident student.

The fees are $20 a year for tuition, $5 for the diploma, and $1 to bind the thesis. The thesis must be typewritten on paper of a prescribed size, and a copy deposited with the College librarian.

Applications for the Master's degree should be sent to the Chairman of the Faculty Committee on post-graduate degrees (see p. 15), who will furnish information about courses.

HONORS.

Scholarship Honors of two grades are awarded at Commencement for excellence in the work of the year. The Honor list for 1901–02 was as follows:

HIGH HONORS.

Lillian Chapman, '04.
Mabel Jencks, '04.
Jean Rose Ingersoll, '05.
Laura Stiles, '05.
Sarah Foss Wolverton, '04.

HONORS.

Lester Snow Bale, '05.
Leonard Rose Ingersoll, '02.
Ralph Starr Butler, '04.
Francis Martin Loud, '04.
Robert Coltman, '05.
Frank Andrews Pettibone, '04.
Cora Edith Draper, '02.
Inez Anna Ridgway, '05.
Frank Hubbard Gleason, '02.
William Steadman Roe, '05.
Ella Louise Warner, '04.

PERKINS SCHOLARS.

Mabel Jencks, '04.
Francis Martin Loud, '04.

HAWLEY SCHOLARS.

Alwina Beyer, '03.
Clare McCoy, '03.
Jessie Gordon, '04.
Elizabeth Porter, '04.
Ellen Jewett, '04.
Nellie Stephens, '03.

HASTINGS PRIZES.

1. Newell Matson Hayden, '02.
2. Charles Wesley Hurd, '02.

COURSE IN COMMERCE AND FINANCE.

This course aims to give students the discipline of a college education and at the same time to furnish special facilities for training young men and women, who upon graduation desire to engage in industrial and commercial pursuits. College education cannot be substituted for business experience, but a properly arranged college course may give the student training and information analogous to that which faculties of law and medicine offer persons preparing for those professions.

The rapid changes that have taken place in industry during the past two decades, have increased the responsibilities of business men throughout the country, and caused an urgent demand for trained men with industrial and administrative ability. The same effect has been produced by the rapid expansion of American commerce into foreign markets, where men of good business habits possessing information regarding the arts and methods of business details, together with thorough training in economics, public law, applied sciences and foreign languages, are in constant demand.

Requirements for Admission.

Students will be admitted to the Freshman class of this course on the same conditions as those imposed for entrance to the A. B., Ph. B. and S. B. courses. See pages 16–20.

Freshman Year.

First Half.	Hours per week.	*Second Half.*	Hours per week.
Algebra	4	Algebra	4
Chemistry	3	Chemistry	3
Economic Geography	2	Industrial History	2
Modern Language	3	Modern Language	3
English B	3	English B	3
Public Speaking A.		Public Speaking A.	

Sophomore Year.

First Half.	Hours per week.	*Second Half.*	Hours per week.
English C	3	English C	3
Physics	3	Physics	3
Modern Language	3	Modern Language	3
Elementary Economics	3	Economics B or G	3
Elementary Law or Historical Politics	3	Political Science B or D	3

Junior Year.

First Half.		*Second Half.*	
Economics C or D	3	Economics G or B	3
Historical Politics or Elementary Law	3	Political Science D or B	3
History C or D	2	Law	3
Geology	3	Auditing and Accounting	3
Generation and Transmission of Power	2	Electives	2
Electives	3	Economics E or Political Science E	2

Senior Year.

First Half.		*Second Half.*	
Economics D or C	3	Law	2
Law	2	History B	3
History of Philosophy	4	Economics E or Political Science E	2
History B or D	2	History of Philosophy	4
Electives	5	Electives	5

Degrees.

Students who have successfully completed the above course of study and who have in addition, satisfied the faculty that they are able to carry on business correspondence in at least one foreign language, will receive the degree of Bachelor of Science in Commerce.

SCHOOL OF ENGINEERING.

FACULTY.

WILLIAM FREDERICK SLOCUM, D. D., LL. D.,
President.

FLORIAN CAJORI, Ph. D.,
Dean, and Head Professor of Mathematics.

LOUIS A. E. AHLERS, A. B.,
Head Professor of Modern Languages and Literatures.

MELVILLE FULLER COOLBAUGH, B. S.,
Instructor in Chemistry.

FRANCIS WHITTEMORE CRAGIN, Ph. D.,
Professor of Geology, Mineralogy and Palæontology.

ELIJAH CLARENCE HILLS, A. B.,
Professor of Spanish.

HENRY W. LAMB,
Instructor in Shop Practice.

FRANK HERBERT LOUD, Ph. D.,
Professor of Mathematics and Astronomy.

EDWARD S. PARSONS, A. M., B. D.,
Bemis Head Professor of English.

SIDNEY F. PATTISON, A. B.,
Instructor in English.

GEORGE B. PRICE,
Instructor in Descriptive Geometry and Mechanical Drawing.

JOHN CUTLER SHEDD, Ph. D.,
Professor of Physics.

HUGH ALLISON SMITH, A. M.,
Assistant Professor of Modern Languages.

WILLIAM E. STARK, A. M.,
Instructor in Surveying.

WILLIAM STRIEBY, A. M., E. M.,
Professor of Chemistry and Metallurgy.

Note.—As need arises, other instructors will be added to the Faculty.

Organization of the School.

The present rapid development of Colorado and the West has created so imperative a demand for instruction in pure and applied science that the Trustees of Colorado College, at the meeting held on Dec. 26, 1902, decided to add to the existing departments of the institution a School of Engineering. Colorado Springs is admirably situated for such a school. The suburban electric railway takes the student to three different plants for the reduction of ore; the mines of Cripple Creek and the metallurgical works of Pueblo are near by; there are in the neighborhood fine examples of mountain railway construction and large electric plants with machinery of modern type. By careful study of local engineering problems and by close contact with the engineering establishments of this vicinity, it will be possible to secure a thorough blending of theoretical and practical instruction.

In the year 1903-'04 the studies and the shop-work of the Freshman and the Sophomore years will be given; in 1904-'05 the Junior studies will be added; and the year following the entire schedule will be offered.

The large new science building, "Palmer Hall," which is now in process of erection, will be completed this year. It will furnish ample accommodations for the work in engineering and pure science. A machine shop for work in wood and iron is also in process of construction.

Requirements for Admission.

The requirements for admission to the engineering courses are the same as to the scientific course (see p. 18), except that the foreign language requirement is only two years. A thorough preparation in mathematics is of great importance. Students are advised to review algebra during the last year of the high school course.

The schedule of recitations will be so arranged that students who on entering are behind in plane trigonometry, but are able to carry a heavy course, may take this subject during the second half of the Freshman year in addition to their regular work.

Degrees.

At the completion of an engineering course the student will receive the degree of Bachelor of Science, with a specific designation of the name of the engineering course taken.

MINING ENGINEERING.

The object of this course is not only to lead to the mastery of the theory, but also, as far as possible, to bring the student into contact with the practical work of the mining engineer. The outline of the mining course is as follows:

Freshman Year.

First Half-year.	Hours per week.	*Second Half-year.*	Hours per week.
Algebra	4	Descriptive Geometry	3
Chemistry B	7	Chemistry B	7
Free Hand and Mechanical Drawing	6	Mechanical Drawing	6
Shop-work		Elementary Surveying	6
English B	3	Shop-work	
Modern Languages	3	English B	3
		Modern Languages	3

Sophomore Year.

Analytics	3	Analytics	2
Calculus	3	Calculus	4
Qualitative Analysis	7	Qualitative Analysis	7
Physics	4	Physics	4
Mineralogy	3	Graphic Statics	4
Machine Design	2	Modern Languages	2
Modern Languages	2		

Junior Year.

	Hours per week.		Hours per week.
Mechanics	4	Mechanics	4
Geology	3	Advanced Mineralogy	2
Crystallography	2	Assaying	8
Assaying	6	Mining Surveying	4
Generation and Transmission of Power	2	Materials of Construction	4
Materials of Construction	3	Structural Metals and Fuels	2
Strength of Materials	3		

Senior Year.

Economic Geology	3	Petrography	3
Hydraulics	2	Metallurgical Laboratory	3
Ore Crushing, Sampling and Fluxing	3	Field-work	4
Gold and Silver Mining	3	Lectures on Mining	3
Lead and Copper Mining	3	Inspection Tours.	
Elementary Law	3	Thesis.	

CIVIL ENGINEERING AND IRRIGATION.

This course aims to give the student a thorough training in the fundamental principles of general engineering, and a measure of specialization in civil and irrigation engineering along the lines demanded by conditions in Colorado and the West.

Freshman Year.

As in the Mining Engineering Course.

Sophomore Year.

First Half-year.	Hours per week.	*Second Half-year.*	Hours per week.
Analytics	3	Analytics	2
Calculus	3	Calculus	4
Advanced Surveying	5	Astronomy	3
Physics	4	Physics	4
Mineralogy *or* Agricultural Chemistry	3	Graphic Statics	4
Machine Design	2	Modern Languages	2
Modern Languages	2		

Junior Year.

	Hours per week.		Hours per week.
Mechanics	4	Mechanics	4
Strength of Materials	3	Railway Construction *or* Meteorology	3
Hydraulics	2	Geodesy	2
Steam Engineering	2	Masonry, Arches and Dams	3
Materials of Construction	2	Roof Trusses and Girders	4
Generation and Transmission of Power *or* Hydrographic Survey	2	Materials of Construction (laboratory)	4
Geology	3	Trigonometric Survey	1

Senior Year.

Dams and Stereotomy	2	Tunnels and Substructures	2
Bridge Stresses	5	Irrigation	2
Railway Engineering	2	Sanitary Engineering	3
Water Supply	3	Municipal Engineering (roads and parks)	2
Elementary Law	3	Mining	3
		Inspection Tours.	
		Thesis.	

ELECTRICAL ENGINEERING.

This course embraces an extensive study of electromagnetism and also a considerable amount of the work usually done in mechanical engineering. The last two years include courses in steam engineering, testing of dynamos, study of alternating current machinery, electric railways, electric lighting, etc.

Freshman Year.

As in Mining Engineering Course.

Sophomore Year.

As in Mining Engineering Course, except that shop-work will take the place of Mineralogy.

Junior Year.

First Half-year.	Hours per week.	*Second Half-year.*	Hours per week.
Mechanics	4	Mechanics	4
Strength of Materials	3	Steam Engineering	2
Hydraulics	2	Applied Electro-magnetism	5
Steam Engineering	2	Electrical Testing	2
Materials of Construction	3	Materials of Construction	4
Generation and Transmission of Power	2	Machine Design	2
Machine Work and Tool Making	2		
Electro-magnetism	3		

Senior Year.

Alternating Currents	5	Alternating Currents and Theory of Transformers	5
Testing Direct Current Dynamos	2	Electric Railways	3
Engine and Boiler Trials	2	Electric Lighting	5
Gas Engines	1	Electricity in Mining and Quarrying	1
Machine Design	2	Inspection Tours.	
Central Station Design	2	Thesis.	
Elementary Law	3		

GENERAL COURSE IN ENGINEERING.

This course permits greater freedom in the election of studies than do the preceding engineering courses. It is intended as a non-professional technical course, which offers opportunities for the student to combine the liberal culture studies and elementary law with studies in applied science. The course aims to give a technical education less extensively specialized. It will supply a practical education for persons eventually looking forward to positions as superintendents, managers, secretaries, or directors of engineering enterprises.

Freshman Year.

As in Mining Engineering Course.

Sophomore Year.

First Half-year.	Hours per week.	*Second Half-year.*	Hours per week.
Analytics	3	Analytics	2
Calculus	3	Calculus	4
Physics	4	Physics	4
Modern Languages	2	Graphical Statics	4
General Electives	6	Modern Languages	2
		General Electives	4

Junior Year.

Mechanics	4	Mechanics	4
Materials of Construction	3	Materials of Construction, (laboratory work)	4
Generation and Transmission of Power	2	Geodesy	2
Geology	3	General Electives	8
General Electives	7		

Senior Year.

Economic Geology	3	Electives.	
Elementary Law	3	Inspection Tours.	
Electives	12	Thesis.	

DEPARTMENT OF ART AND DESIGN.

Instruction is given in Academic drawing, painting, modeling, artistic anatomy, historic ornament, decorative designing, illustration, mechanical drawing and perspective. Emphasis is placed upon thoroughness and maintenance of artistic ideals, and students are encouraged to strike out along original lines. Those without previous training devote most of their time to drawing in pencil and charcoal from the cast and still life, but from the first some work is done with colors. Advanced students draw and paint from life in charcoal, oil, water color and pastel. Every week a subject to be illustrated by an original composition is given and the pupil executes it in any medium he desires. Students model in composite clay, first from simple objects, afterwards from the cast and life. Studio

talks are given every month. An important feature is the sketch class, conducted exclusively by the students. Special classes for children are held twice a week.

The opening of Perkins Fine Arts Hall marked an important advance in the work of the department. In it are the exhibition rooms and the studios which are open from 9:30 A. M. to 5 P. M. Several exhibitions of students' work are held during each year. The drawings receiving honorable mention on these occasions are retained for the annual exhibition.

All materials except easels and drawing boards are furnished by the students. Lockers are provided.

TUITION.

One year, five days a week in studio	$100 00
One half-year, five days a week in studio	60 00
One half-year, two days a week in studio	50 00
One half-year, two days a week	30 00
Single lessons, (in class)	1 50
Single lessons, (private)	2 00

THE CUTLER ACADEMY.

Cutler Academy, named after the late Henry Cutler of Massachusetts, a generous and steadfast friend of Colorado College, provides a thorough preparation for any college in the United States. While the preparatory training is the principal aim, the plan of study is arranged to meet the requirements of students who do not propose entering upon college work. The course embraces four years, and the teaching is conducted by instructors many of whom are also engaged in the work of the college.

A student in Cutler Academy preparing for some other college than Colorado College, where the requirements for admission differ in some particulars, can by timely application to the instructors secure such modification of his course as will meet the necessities of his case.

With the completion of the new Palmer Hall (see p. 74) the building heretofore known as Palmer Hall will become the Cutler Academy Building.

Students not residents of Colorado Springs are required to live in the Academy dormitories. The girls live in Montgomery Hall. A house for the boys will be provided at the beginning of the next school year.

Students enjoy the privileges of the Coburn Library, and many take the courses in Fine Arts and Music, on the same terms as students of the College.

Two excellent literary societies are maintained, one by the girls, the other by the boys.

The athletic interests of the Academy are directed by a council composed of instructors, graduates and students.

Correspondence concerning the Cutler Academy should be addressed to the Principal.

THE CUTLER ACADEMY—FACULTY.

WILLIAM FREDERICK SLOCUM,
President.

M. CLEMENT GILE, Principal,
Latin and Greek.

WILLIAM E. STARK, Acting-Principal,
Physics.

LOUIS A. E. AHLERS,
French and German.

ERNEST BREHAUT,
Latin.

MARIANNA BROWN,
Latin.

FLORIAN CAJORI,
Mathematics.

MELVILLE FULLER COOLBAUGH,
Chemistry.

ANNA PEARL COOPER,
English and History.

EDITH PRESTON HUBBARD,
Mathematics.

HANNAH TAYLOR MUIR,
Medical Adviser.

ATHERTON NOYES,
History and Greek.

MARION EDWARDS PARK,
Latin.

HOMER LE ROY SHANTZ,
Physiology and Botany.

JOHN C. SHEDD,
Physics.

HUGH A. SMITH,
French and German.

WILLIAM STRIEBY,
Chemistry.

ADMISSION.

Candidates for admission to the Cutler Academy are expected to have finished the eighth grammar grade in the public schools, or to have covered the equivalent of the following work:

Arithmetic—Franklin or Wentworth.

English—Reed and Kellogg's Higher Lessons.

History—Montgomery's United States History.

Geography—Any school Geography.

Applicants for admission who have, within six months, been students in the Colorado Springs High School, must present certificates from the High School showing completion of the work of the grade preparatory to the Academy class which they wish to enter. The High School will, upon payment of a small fee, provide special examinations for this purpose, if the regular examinations were not passed. The Academy will not examine such applicants, except upon subjects which were not included in their High School course.

Candidates for admission in 1903 should present themselves at Palmer Hall on Tuesday, June 2nd, or Tuesday, September 8th, at 9 A. M. Each applicant must bring a certificate of good moral character and a full written statement of studies pursued elsewhere. Any student whose influence is felt to be injurious to good scholarship or good morals will not be permitted to remain in the Academy.

COURSES OF INSTRUCTION.

CLASSICAL COURSE.

FIRST YEAR.

		HOURS PER WEEK.
First Half.	*Latin:* Comstock's First Latin Book; Roman History	6
	Algebra: Through Fractions	6
	English: Review of Grammar (Carpenter); study of narration; composition work	4
	Required Supplementary Readings, see p. 70.	
	History: English	2
		18
Second Half.	*Latin:* First Latin Book completed; Allen and Greenough's Latin Grammar; Cæsar; reading at sight; Roman History	6
	Algebra: Through Radicals and easy Quadratic Equations	6
	English: Gayley's Classic Myths; study of description; composition work	4
	Required Supplementary Readings, see p. 70.	
	History: English	2
		18

SECOND YEAR.

First Half.	*Latin:* Allen and Greenough's Latin Grammar; Cæsar; prose composition; reading at sight	4
	Greek: Goodwin's Grammar; White's Beginner's Greek Book; Greek Reader	5
	English: Genung's Outlines of Rhetoric, choice of words, phraseology, special objects in style	3
	Required Supplementary Readings, see p. 70.	
	Geometry	3
	German, French, History (as in Scientific Course) or *Physiology* (as in Scientific Course)	3 or 4
		18 or 19

		Hours per week.
Second Half.	*Latin:* Grammar; Cæsar; Ovid, Stories from the Metamorphoses; reading at sight; prose composition	4
	Greek: Grammar; Greek Reader; Xenophon's Anabasis; reading at sight	5
	English: Genung concluded, the sentence, the paragraph, the whole composition, writing by means of outlines, methods of transition	3
	Required Supplementary Readings, see p. 70.	
	Geometry	3
	German, French, History (as in Scientific Course) or *Botany* (as in Scientific Course)	3 or 4
		18 or 19

THIRD YEAR.

First Half.	*Latin:* Grammar; Vergil, Æneid, Books I-III; reading at sight; prose composition; Greek History	5
	Greek: Xenophon's Anabasis, 2 books; reading at sight; written translations; composition (Jones); Greek History	5
	Algebra and Plane Geometry	4
	English: George Eliot's Silas Marner, Scott's Ivanhoe, Goldsmith's Vicar of Wakefield, Shakespeare's Merchant of Venice and Julius Cæsar; Text: Painter's Introduction to English Literature	3
	Required Supplementary Readings, see p. 70.	
		17
Second Half.	*Latin:* Grammar; Vergil, Æneid, Books IV-VI, The Bucolics; reading at sight; prose composition; Greek History	5
	Greek: Xenophon's Anabasis, 2 books or an equivalent; reading at sight; composition; Greek History	5
	Sōlid Geometry or *Botany* (as in Second Year of Scientific Course)	4
	English: Shakespeare's Macbeth, Coleridge's Ancient Mariner, Lowell's Vision of Sir Launfal, Addison's Sir Roger de Coverley Papers; Text: Painter's Introduction to English Literature	3
	Required Supplementary Readings, see p. 70.	
		17

FOURTH YEAR.

		Hours per week.
First Half.	*Latin:* Grammar; Cicero, Four orations against Catiline; reading at sight; prose composition	5
	Greek: Homer, Iliad, Books I-III; composition (Jones); reading at sight	5
	Mathematics: Review and general exercises	3
	English: Burke's Oration on Conciliation with America, Milton's L'Allegro, Il Penseroso, Comus and Lycidas; Text: Painter's Introduction to American Literature	2
	Required Supplementary Readings, see p. 70.	
	German, French, Physics, Chemistry or *Freshman Mathematics*	4
		19
Second Half.	*Latin:* Grammar; Cicero, Orations for Archias, for Marcellus, and for the Manilian Law; reading at sight, prose composition	5
	Greek: Homer, Iliad, Books IV-VI, and Odyssey, Books I-III; written translations; composition	5
	Mathematics: Review and general exercises	3
	English: Tennyson's Princess, Carlyle's Essay on Burns, Macaulay's Essays on Milton and Addison; Text: Painter's Introduction to American Literature	2
	Required Supplementary Readings, see p. 70.	
	German, French, Physics, Chemistry, or *Freshman Mathematics* (continued)	4
		19

SCIENTIFIC COURSE.

FIRST YEAR.

First Half.	*Latin:* As in Classical Course, or *German* 4 and *Free Hand Drawing* (4) 2	6
	Algebra: As in Classical Course	6
	English: As in Classical Course	4
	History: English	2
		18
Second Half.	*Latin:* First half-year continued, or *German and Drawing*	6
	Algebra	6
	English: As in Classical Course	4
	History: English	2
		18

SECOND YEAR.

		Hours per week.
First Half.	*Latin*:* As in Classical Course / *French:* Alternative with Latin	4
	Physiology: Martin's Human Body	4
	German†	1
	English: As in Classical Course	3
	Geometry	3
	General History	3
		17 or 18
Second Half.	*Latin or French*	4
	German: As in first half-year	1
	English: As in Classical Course	3
	Geometry	3
	History: As in first half-year	3
	Botany	4
	Drawing (2)	1
		18 or 19

THIRD YEAR.

First Half.	*Latin:* As in Classical Course, or *French*‖ 1 and *German* 4	5
	Chemistry: Williams' Elements of Chemistry; Laboratory Practice; Fee, $6.00	4
	Algebra and Plane Geometry: As in Classical Course	4
	English: As in Classical Course	3
	Free Hand or Mechanical Drawing (4)	2
		18
Second Half.	*Latin* or *German* and *French*‖: First half-year continued	5
	Chemistry: First half-year continued	4
	Solid Geometry: As in Classical Course	4
	English: As in Classical Course	3
	Drawing: First half-year continued (4)	2
		18

* Latin, if elected, must be taken at least two years.
† For those who elected German in the first year.
‖ For those who elected French in the second year.

FOURTH YEAR.

		Hours per week.
First Half.	*Latin* or *French* 4, (or *German*) and *Mechanical* or *Free Hand Drawing* (2) 1	5
	Physics: Text-book and laboratory practice	4
	Review Mathematics: As in Classical Course	3
	Algebra and *Plane Trigonometry:* (Freshman Mathematics) or *Chemistry B* (see p. 42.)	4
	English: As in Classical Course	2
		18
Second Half.	*Latin* or *French* (or *German*) and *Drawing:* First half-year's work continued	5
	Physics: First half-year continued	4
	Review Mathematics: As in Classical Course	3
	Mathematics: Plane Trigonometry; Solid Geometry, or *Chemistry B*, first half-year continued	4
	English: As in Classical Course	2
		18

HONORS.

Scholarship Honors of two grades are awarded at Commencement for excellence in the work of the year. The Honor list for 1901–02 was as follows:

HIGH HONORS.

Elizabeth Jeannette Lockhart, '02.
Florence Kellogg Root, '02.
John MacArthur Maguire, '04.
William S. Jackson, Jr., '05.
Abby Townsend Lansing, '05.

HONORS.

Harvey Ezra Boatright, '03.
Ebenezer Irish, '03.
Lulu Wilcox Draper, '04.
Samuel Ballantine Fairbank, '04.
Harold Roberts, '04.
Earl S. Alden, '05.
David Lawrence Cohoe, Special.

REQUIRED SUPPLEMENTARY READINGS IN ENGLISH.

First Academy: Macaulay's Lays of Ancient Rome; Hawthorne's Wonder Book and Tanglewood Tales; Æsop's Fables; Gulliver's Travels; Arabian Nights; Scott's Kenilworth; Dickens' Oliver Twist; Hughes' Tom Brown at Rugby; Kipling's Jungle Books; Kingsley's Water Babies; Tennyson's Enoch Arden; Lamb's Tales from Shakespeare.

Second Academy: St. Pierre's Paul and Virginia; Lanier's The Boy's King Arthur; Longfellow's Tales of a Wayside Inn; Irving's Tales of a Traveler; Dickens' Christmas Carol; Lanier's The Boy's Froissart; Bryant's Iliad; Scott's Talisman; Kingsley's Westward Ho; Hawthorne's Twice Told Tales; Brown's Rab and His Friends.

Third Academy: Scott's Marmion and Lady of the Lake; Shakespeare's Twelfth Night and Richard II; Irving's Conquest of Granada; Scott's Quentin Durward and Peveril of the Peak; Bulwer's The Last Days of Pompeii; Plutarch's Lives of Themistocles and Alcibiades; Fisk's War of Independence; Thackeray's Newcomes.

Fourth Academy: Palmer's Odyssey (or Leaf's Iliad); Matthew Arnold's Sohrab and Rustum; Scott's Guy Mannering and The Heart of Midlothian; Blackmore's Lorna Doone; Curtis' Prue and I; Saintine's Picciola; Jane Austen's Pride and Prejudice; Fiske's Critical Period of American History.

LOCATION.

Colorado College is fortunate in its environment. Colorado Springs, the county seat of El Paso County, and the third largest municipality of the commonwealth, is remarkable for its history and character, and is admirably adapted to be the seat of a college. Founded in 1871, under the direction of men of shrewd foresight and broad views, it has maintained from the beginning high standards of morality and culture. Saloons and the attendant destructive influences are absent. Radiating railroad systems and the recent development of neighboring gold fields have fostered its wealth. Many visitors are attracted hither, both pleasure seekers and health seekers, but the invalids are so far outnumbered that the place has none of the depressing influence so often observed at noted health resorts. The lover of nature might seek far before finding a spot more favored. The mountains are close at hand, their serrated outline occupying about one-third of the horizon. In the center of the range, less than a dozen miles away, stands Pike's Peak. Its summit is reached by a cog railway, as well as by bridle-paths and a carriage road. About its base are numerous canons, and in one of these, around a celebrated group of mineral springs, has grown up the city of Manitou. The climate of Colorado Springs has attained a world-wide reputation by reason of the opportunity for outdoor exercise afforded by the great number of fine days and the dryness and rarity of the air, helpful in cases of malarial diseases, asthma, and incipient phthisis. Students unable to work in other climates may here continue their studies while at the same time making a permanent gain in health.

COLLEGE BUILDINGS.

The buildings of the College are situated on a tract of about 50 acres, in the heart of the best residence portion of the city.

Cutler Hall (formerly Palmer Hall), the oldest building on the campus, was first occupied in 1880. It contains, in addition to lecture-rooms, chemical, physical and biological laboratories, and the museum. (See p. 77.)

The Library, given in 1894 by the late Mr. N. P. Coburn of Newton, Mass., and erected at a cost of $50,000, is of great architectural beauty and admirably adapted to its purpose. It is of the "Peach Blow" sandstone of Colorado, and its roof is of red tile with copper mountings. The interior, with its ceiling twenty-six feet high, its red oak woodwork, its picturesque galleries, its inviting alcoves, its great stone fire-places, is exceedingly attractive. Long arched windows extend from floor to ceiling. A full-sized cast of the "Winged Victory" of Samothrace stands at one end of the main hall. In recesses are fine marble busts of Antinous and Dante, and casts of the Hermes of Praxiteles and of Mercié's David. Mr. A. L. Dickerman's collection of rare and valuable Indian curiosities adds to the interest of the room.

The President's Residence, at the northern boundary of the campus, was purchased by the Trustees in 1888.

The Astronomical Observatory is the gift of Henry R. Wolcott, Esq., of Denver, and was completed in 1894. On the lower floor are a lecture room, a transit-room and a photographic dark room. Upstairs is the dome room, containing the equatorial telescope.

The Gymnasium, built by the students of the College in 1891, contains an excellent assortment of apparatus. See "Physical Training," p. 48.

Announcement

...of...

New Courses in Colorado College

The following new courses of study will be offered by Colorado College in September, 1903.

1. **ENGINEERING.**

   a. Mining Engineering. See *Bulletin*, 1903, p. 55.

   b. Civil Engineering and Irrigation. See *Bulletin*, 1903, p. 56.

   c. Electrical Engineering. See *Bulletin*, 1903, p. 57.

   d. General Course in Engineering. See *Bulletin*, 1903, p. 58.

2. **MEDICINE.** A preliminary course which may be counted towards the Bachelor's degree in Colorado College and which will enable a graduate to obtain credit for the first year's work in any one of several medical schools of good standing. See *Bulletin*, 1903, p. 45, note.

3. **LAW.** A preliminary course which may be counted towards the Bachelor's degree in Colorado College and which is intended as the equivalent of the first year's work in a law school. See *Bulletin*, 1903, p. 38.

4. **COMMERCE AND FINANCE.** A course which aims to give students the discipline of a college education and to prepare them for commercial and industrial pursuits. See *Bulletin*, 1903, p. 51.

For further information, write to

WILLIAM F. SLOCUM,
President.

EDWARD S. PARSONS,
Dean of Department of Liberal Arts.

Or FLORIAN CAJORI,
Dean of School of Engineering.

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The Gymnasium, built by the students of the College in 1891, contains an excellent assortment of apparatus. See "Physical Training," p. 48.

The Perkins Fine Arts Hall, named for one of the principal donors, the late Willard B. Perkins, of Colorado Springs, was completed in 1900. It is a two-story stone building, erected at a cost of $30,000. The lower story is a large auditorium, seating 600, in which the chapel exercises are held and concerts and lectures are given. This room contains a valuable pipe organ, given by Miss Elizabeth Cheney, of Wellesley, Mass., in memory of her brother, Mr. Charles P. Cheney. In the hallway stands a bronze statue of the Flying Mercury. The upper story contains the studios and lecture rooms of the Department of Fine Arts and the practice rooms for courses in Music. Mr. Louis R. Ehrich has presented Mr. Leslie J. Skelton's painting, "Meadow-Land, Montigny, France," as the nucleus of a permanent collection for the exhibition room. To this has been added, through the instrumentality of Mr. Skelton, a picture by Iwill. There are also two paintings by Mr. Harvey Young: "Crystal Lake, California," the gift of Mr. Verner Z. Reed, and "La Sal Mountains," the gift of General William J. Palmer, Mr. James F. Burns and Mr. John G. Shields; and a valuable collection of Japanese prints, presented by Mr. Burns.

COLLEGE RESIDENCES.

Hagerman Hall is a substantial stone building, built in 1889, and used as a home for young men. Besides the students' rooms, which are well lighted and attractive, it contains a dining room, accommodating one hundred and fifty persons, now used by a young men's boarding club, and the Y. M. C. A. reading room. In the upper story is the Weather Bureau office.

Montgomery Hall was erected and furnished in 1891 by the Woman's Educational Society, and presented free of debt to the College. It provides a comfortable home for young women. Its dining-room is now used by a young women's boarding club.

Ticknor Hall, the generous and beautiful gift of Miss Elizabeth Cheney, was opened as a home for the young women of the College in January, 1898. Its comfort and conveniences are the result of careful study of the most recently-built dormitories for women. Besides students' rooms, it contains the College dining-room, drawing-rooms and guest-rooms, and a study-room, comfortably furnished and provided with reference books, for the use of all young women of the College, and an infirmary capable of complete isolation. The infirmary is open to all young women living on the campus, and is in charge of a trained nurse, whose services, whether in the infirmary or in the students' rooms, are paid for by an annual fee of $5.00 from each young woman. This fee is due in September.

McGregor Hall, a commodious and convenient building, now in process of construction, will be ready in September, 1903, for use as a third residence for young women.

No young woman will be received into the halls who is less than sixteen years of age, and who is not taking at least fifteen hours' work or its equivalent. After all vacancies in the halls are filled, suitable rooms in the vicinity may be secured subject to the approval of the Dean of Women.

PALMER HALL.

This building, which is to cost $270,000, is now in process of erection, and will be completed next fall. It is to be two hundred an eighty-seven feet long, with a depth from north to south of ninety-five feet. Besides a sub-basement six feet high, there are to be three stories, described in the plans as a basement and a first and second floor. The style of architecture is that which has been chosen for the entire system of buildings eventually to occupy the College reservation, the first example of which was presented in the Coburn library. The struc-

ture is to be fire-proof, with steel skeleton frames and concrete floors, overlaid with terazzo finish. In the basement will be laboratories for Chemistry, Physics and Psycho-physics, and a large demonstration room. On the first floor will be found the offices of administration and a number of lecture rooms. The second floor will contain the laboratories and lecture rooms for Biology, Geology and Mineralogy. There will also be a large, well-lighted Museum for the natural science collections of the College. It is the aim of the Faculty and Trustees to make this building contribute to the scientific development of the locality and of the State.

All the foregoing College buildings, except the Gymnasium, are of stone. Heat and electric light are furnished to all from a central plant.

LIBRARY.

The Library building has been elsewhere described. In it are about thirty thousand volumes and as many pamphlets. The leading literary and scientific journals are received, as are also the United States Government publications and those of the State of Colorado. Of United States documents the library now has about five thousand volumes, including the records of Congress complete from 1847, and many valuable records for the period 1774–1837. These documents are arranged on the plan adopted in the library of the Superintendent of United States Documents at Washington.

The Medical Alcove was originated in 1894 when the late Dr. B. F. D. Adams, of Colorado Springs, presented to the College his extensive medical library. The El Paso Medical Society contributes the transactions of Medical

Societies and standard works purchased by the Society. In 1896 the collection was enlarged by the gift of two hundred and fifty volumes and three hundred pamphlets from the late Dr. E. C. Kimball, of Colorado Springs. The whole collection has recently been re-catalogued.

In 1896 the control of the Library was vested in a board of twenty-five, composed of members of the Faculty and Board of Trustees and of persons not otherwise connected with the College, and the Library was opened to residents of the city. All the privileges of the Library, including the use of current magazines and periodicals, are open to the public on payment of the fee required of College students. The Library is open from 8 A. M. to 6 P. M.

The COBURN LIBRARY BOOK CLUB, organized in 1897, provides its members with the best new books, which are given to the Library after twelve months. The fee is $5 a year or $2 for three months. Members enjoy the full privileges of the Library. The Club has purchased about sixteen hundred books, of which nearly thirteen hundred have been given to the general Library. The College Women's Club has recently given the nucleus of a collection of books on pottery. The Wednesday Art Club and the local chapter of The Daughters of the American Revolution have also started collections of books on their special topics.

READING ROOMS.

In the Library building is a reading room, where the current literary and scientific magazines, as well as a number of leading newspapers, may be consulted. The young men have the benefit of a similar room in Hagerman Hall, under the control of the Young Men's Christian Association of the College, while for the young women a study and reading room is provided at Ticknor Hall.

LABORATORIES AND APPARATUS

In addition to the physical, chemical and biological laboratories, a mineralogical laboratory has been recently established. The equipment includes eight working collections and six mineralogical tables supplied with all the necessary apparatus.

The Observatory has a telescope of four inches aperture, presented by Mr. Henry R. Wolcott, of Denver, a transit instrument and a sidereal clock, both given by Mr. Charles S. Blackman of Montreal, Canada.

A meteorological Observing Station is maintained by the College and daily records are made and reported to the United States Weather Bureau. A monthly report is also made to the Health Department of Colorado Springs. The instruments now in the station are dry and wet bulb thermometers, a maximum and a minimum thermometer, a Richard thermograph, a mercurial barometer, a self-registering anemometer, an anemoscope, a rain and snow gauge, and a Draper barograph.

MUSEUM.

An excellent foundation for a Museum was early laid by the gifts of Prof. J. H. Kerr, Rev. E. N. Bartlett, Dr. E. P. Tenney and Mr. George Fowler, and by the purchase of mineral and botanical collections from the Rev. R. T. Cross and Prof. Marcus E. Jones respectively. The gifts in geology and zoology by Professor Kerr, donor of some two thousand specimens, were destined to be of special value, the former including as their central feature the Ward "College Collection" of over 600 representative minerals and rocks.

By far the largest and most important contributions to the Museum are the W. S. Stratton donation and the collection given by General William J. Palmer and the Colorado Springs Company. Through the generosity of Mr. Stratton large natural history collections, formerly at Coronado Beach, were secured in 1900 at a cost of $33,000 and are now stored, awaiting the completion of the Science Building. They include a large collection of mammals and birds; a superb and very extensive collection of minerals, common, commercial and rare; and a collection of casts and restorations of fossils, particularly of the more remarkable of the extinct Vertebrata. A few of the more noteworthy specialties are a mounted group of all the known genera of Marsupial Mammals, a group of mounted Orang Outangs (valued at about $3,000, owing to the diminishing number of these animals), the cast of Megatherium cuvieri, a gigantic ground-sloth, a complete mounted skeleton of one of the largest whales, and a restoration of the mammoth of the Ice Age, one of the largest and most remarkable single pieces ever exhibited in any museum, after an original made in Europe by Prof. Leo Phillipp Martin, assisted by Mr. G. Stainsky, now of Colorado Springs.

In 1896 General William J. Palmer and the Colorado Springs Company purchased for the College the large palæontological cabinet of Professor Cragin, consisting of some eight thousand specimens from Colorado, Kansas, Indian Territory, Texas and other States. It contains some mineral and zoological specimens, but is chiefly valuable for its palæontological material, which includes remains of Pliocene horses, llamas, Miocene rhinoceroses and mastodons, Cretaceous saurians, Tertiary fishes, and a large series of shells, echinoderms, and other invertebrates from the lower Cretaceous. It is of importance, not only as supplying a large part of the geological record not other-

wise represented in the museum, but also as being the elaborated result of years of research and containing the types of many new species and some new genera of fossils, both invertebrate and vertebrate. Among these type-fossils, the most important is the large plesiosaurian reptile *Trinacromerum*, the type of a new genus and species described from the Cretaceous of Kansas in 1888.

Valuable recent contributions to the Museum are the collection of fossil invertebrates, chiefly Tertiary Mollusca from the Atlantic slope, presented by Professor William B. Clark, of Johns Hopkins, State Geologist of Maryland, and the Educational Series of Rocks received from Mr. Charles D. Walcott, Director of the United States Geological Survey. The latter is a systematic collection of unaltered and metamorphic rocks, including those of mechanical, chemical, organic and igneous origin, together with a few specimens illustrating special geological processes. It includes 156 numbers, prepared and catalogued by Mr. Joseph S. Diller of the Survey.

In addition to those already mentioned, the Museum equipment in geology includes collections of rocks from the Cripple Creek mining district, presented by Professor George H. Stone, and from New Hampshire (the N. H. Geological Survey Series), one of minerals from Lake Superior, the Rufus M. Bagg collection of Foraminifera, and many miscellaneous specimens. In Zoology, the Museum has useful collections in sponges, corals, echinoderms, mollusks and birds, with small herpetological and osteological collections, and some material in other groups.

RELIGIOUS LIFE.

The College is distinctly Christian, and recognizes Christian character as the highest attainment. It is un-

sectarian in its management. Inquiry is made as to the denominational affiliations of the students at entrance, and what churches in the city they desire to attend; lists are sent to the pastors of these churches, who seek out the students and bring about them the influence of church homes. Morning prayer is held in the chapel daily, attendance upon which is required of all students. Occasionally the service is shortened for the President's ethical talk, in which he discusses questions bearing directly on student life.

Occasional Vesper services are held in the chapel, conducted by clergymen of various denominations. The Day of Prayer for Colleges is marked by appropriate observance. The address this year was delivered by Mr. W. F. Sturgis of Yale University. The weekly prayer meetings on Sunday afternoons and Friday evenings are in charge of the student organizations.

The Young Men's and the Young Women's Christian Associations are represented by strong branches, under the auspices of which are conducted mission work at home and abroad, and classes for Bible study. These Associations send delegates to all the State and national conferences. The Student Volunteer movement is also represented. Of the former members of the band, some are continuing in other institutions their preparation for the foreign field, and others are already actively engaged in missionary work.

At the beginning of the College year members of the Associations meet all trains and welcome new students.

STUDENT PUBLICATIONS.

The *Tiger*, a weekly newspaper, is issued by an editorial board composed of College students. An *Annual* is published in May by the Junior class. A *Handbook* of information is issued at the beginning of the College year by the Y. M. C. A.

LITERARY SOCIETIES.

The Oratorical and Debating Association has charge of oratorical and debating contests. All students of the College are members of the Association, and may compete in the oratorical contest or for a place on the intercollegiate debating team.

The Apollonian Club, the Pearsons Literary Society and the Miltonian Club, composed of young men, and the Minerva Society and the Contemporary Club, composed of young women, hold weekly meetings for debate and other literary work.

COLORADO COLLEGE SCIENTIFIC SOCIETY.

The Colorado College Scientific Society was organized in 1890. Its objects are: "The discussion of recent scientific results, the promotion among its members of scientific inquiry and investigation, and the publication of the more important papers read at the meetings." Nine annual publications, entitled "Colorado College Studies," have been issued, and a large number of exchanges have been secured from associations of a like nature, including several foreign societies. The attention which the "Studies" have received from scientific men everywhere encourages the Society to continue this publication. The contents of Volume Ten are as follows:

The Earliest "Life of Milton."—*Professor E. S. Parsons.*

La Femme dans les Chansons de Geste, concluded.—*Professor H. A. Smith.*

An Interferometer Study of Radiations in a Magnetic Field.—*Professor John C. Shedd.*

Students are encouraged to attend the monthly meetings of the Society.

The Secretary of the Society, to whom all correspondence, exchanges, etc., should be addressed, is Dr. Florian Cajori.

OFFICERS OF THE ALUMNI ASSOCIATION.

Homer Le Roy Shantz, '01,	President.
Matilda McAllister, '99,	Vice President.
Del Heizer, '99,	Secretary.
F. S. Caldwell, '00,	Treasurer.

COLLEGE LECTURE COURSE.

Since 1894 courses of lectures and single addresses have been given in Colorado Springs and other cities in the state. It is the purpose of the College to expand this work as facilities and opportunities increase.

The following lectures form the program for 1902-1903:

President Slocum:
European Universities.

Professor Cajori:
Modern Mysticism.

Professor Ahlers:
Edmond Rostand's L'Aiglon; Goethe's Faust (three lectures); Henrik Ibsen (three lectures); The Minnesingers and the Chivalric Age; Zola; Tolstoi.

Professor Urdahl:
Björnstjerne Björnson's Beyond One's Strength; A Study of the Social Problem.

Professor Hills:
The Spanish Language and Literature; Language and Literature of French Canada.

Dr. Lancaster:
The Child; Criminal Tendencies in Children.

Principal Stark:
Municipal Coöperation; Manual Training.

Mr. W. F. Sturgis:
The Study of Botany.

GLEE CLUBS.

The College Glee Club is in its sixth year, and is under the direction of Mr. Samuel Jessop of the Musical Faculty. A Mandolin Club accompanied the Glee Club on its tour in the vacation. The clubs gave concerts this year in the following places: Pueblo, Florence, Canon City, Salida, Grand Junction, Delta, Montrose, Ouray, Telluride, Durango, Silverton, Denver, Victor and Colorado Springs.

The Young Women's Glee Club, under the leadership of Mr. Jessop, is now in its fifth year and is doing admirable work.

SPECIAL STUDENTS.

Special students will be received, at the discretion of the Faculty, into such classes as they are qualified to enter. It is the rule of the College that such students must attend the examinations as well as the ordinary recitations of their classes, subject to the same conditions as other students.

Several of the courses of lectures which form part of the College instruction, particularly in the department of Philosophy, are open to the public on payment of a small fee, and without any requirement of examination.

EXPENSES.

Tuition by the year	$35 00
Matriculation fee	5 00
Library fee	3 00
(From the above named fees there is no rebate in case of withdrawal.)	
Board in Montgomery Hall (club for young women), a week	2 50
Board in Hagerman Hall (club for young men), a week	3 00
Board in Ticknor Hall (college table), a week	4 00
Rooms warmed, furnished and lighted, by the year, for each occupant	$40 00 to 80 00

The number of rooms under $80 is limited. Application should be made early. Rooms are rented by the year, and will be retained for incoming students only when the application is accompanied by a deposit of $5. This fee will be credited on the bills for room rent, and will be refunded only in case the room is given up by September first.

Students are required to furnish towels, bed linen and blankets.

Fees of the College physician:

Office consultation	$ 50
Visits to rooms	1 00

For prolonged illness and in case of contagious disease, a special nurse is employed, and the expenses are charged to the patient.

COLLEGE BILLS.

The bills for tuition and room rent are issued at the beginning of each half-year, and are payable immediately. Students who withdraw before the end of the term pay full tuition. Students who withdraw less than six weeks before the end of the term pay full room rent. Board bills are payable monthly, in advance, and no rebate is made for absences of less than a week.

SCHOLARSHIPS.

The income of the following scholarships is devoted to the aid of worthy students who may need assistance in completing their course, and who, by their scholarship and character, prove themselves worthy of such assistance.

The Thomas Davee Scholarship of $500, established by the late Mrs. T. V. D. Mitchell, of West Minot, Maine.

The Rice Scholarship of $700, established by friends of the Rev. Chas. B. Rice, D. D., of Danvers, Mass.

The Currier Scholarship of $1,000, founded by the late Hon. Warren Currier, of St. Louis, Mo.

The Edwards Scholarship of $500, given by the Congregational Church of Wellesley Hill, Mass.

The Mary Caroline Quincy Scholarship of $500, given by the late Mr. George Henry Quincy, of Boston, Mass.

The Lawrence Myers Scholarship of $1,000, and the Lucy Platt Myers Scholarship of $1,000, given by Mrs. Laetitia M. Myers, of Plainfield, New Jersey.

The Fay Scholarship of $1,000, founded by the late Eliza A. Fay, of Boston, Mass.

A Scholarship of $1,000, given by Mr. William F. Richards, of Newport, N. H., through the Woman's Educational Society of Colorado College.

The Willard B. Perkins Scholarship of $7,000. The second Willard B. Perkins Scholarship of $7,000. These two scholarships were given by the late Willard B. Perkins, of Colorado Springs.

The Hawley Scholarship Fund, now amounting to about $10,000, founded by the will of Mrs. Mary R. Hawley, of Baltimore, Md., the annual income of which is used in the payment of scholarships of such young women of the College as the Faculty may recommend, preference being given to those who are fitting themselves for Christian work. This year six scholarships are offered from this fund.

The Hawley Memorial Fund, now amounting to about $7,500, founded by the will of Mrs. Mary R. Hawley, of Baltimore, Md., in memory of her husband, Mr. Martin Hawley, the annual income of which is loaned to "worthy and deserving students of the College, as the Faculty may see proper."

The Strettell Memorial Fund of $2,000, given by Mrs. Alma G. V. Harrison of London, England, and General

William J. Palmer of Colorado Springs, in memory of Mr. Arthur E. V. Strettell, Mrs. Harrison's brother, who died in Colorado Springs in 1882. The income of this fund is to be used to aid students suffering from lung troubles.

The Mary G. Slocum Scholarship of $100 a year, given by the Woman's Educational Society of Colorado College. This scholarship is awarded on the basis of competition to young men of the Junior Class.

The C. C. Hemming Scholarship of $225 a year, given by Mr. C. C. Hemming of Colorado Springs, is open for competition to the young men of the Junior Class of the College of Liberal Arts. The award is made on the basis of scholarship, character and general fitness. The recipient shall have been for two years a regular student in the College, shall return for his Senior year, and shall have expressed his determination to graduate. The holder of the Perkins Scholarship shall not be eligible.

Several other scholarships are supported by annual subscription.

Self-Support.—Advanced students of high standing have occasional opportunities for private teaching. Capable and faithful young men can often find work in town. A limited amount of service in Montgomery and Ticknor Halls is offered to young women. This is not often available for first year students.

PRIZES.

The Hastings Prizes.—The sum of $500 has been given by Mr. F. R. Hastings, of Colorado Springs, the income of which is to be used in providing prizes for the best two theses written by students in the course on the Evolution of Religious Thought.

The Loyal Legion and Grand Army Prizes.—These prizes are offered by members of the Loyal Legion and of the Grand Army of the Republic for excellence in oratory. The contest is open to members of the young men's literary societies and is held on Decoration Day.

THE COLORADO COLLEGE PARK ASSOCIATION.

During the past year, the Colorado College Park Association has expended $8,500 in parking the campus. General William J. Palmer has provided for the maintenance of the park for five years by an annual contribution of $1,000.

THE WOMAN'S EDUCATIONAL SOCIETY.

This Society was formed in April, 1889, by the women of Colorado Springs. Its purpose, as expressed in its constitution, "is to give physical, intellectual and spiritual aid to students in any department of Colorado College." This Society built Montgomery Hall, furnished Ticknor and South Halls, and has been of service in many ways to the College. Its members endeavor to come into personal relations with the students, especially with those who are supporting themselves; they try to find work for them and by friendly advice assist them in their efforts to secure an education. Loans are made on the following conditions:

First—Loans may be made to students who have been in the College for one term and are recommended by the Faculty as in every way deserving of such aid.

Second—No student shall be allowed to incur an indebtedness to the Society of more than $300.

Third—Students may receive loans without interest until their connection with the College ceases; after that time their notes shall draw interest at 4 per cent.

For the scholarships within the gift of the Society see pp. 85, 86.

The officers for the current year are:

President—Mrs. William F. Slocum.
First Vice-President—Mrs. John R. Hanna.
Second Vice-President—Mrs. Francis W. Goddard.
Third Vice President—Mrs. L. A. E. Ahlers.
Recording Secretary—Mrs. W. E. Fette.
Corresponding Secretary—Mrs. Edward S. Parsons.
Treasurer—Mrs. Florian Cajori.
Auditor—Miss Priscilla Sater.

THE HOSPITAL FUND.

The Trustees of the Bellevue Sanitarium have given to the College nearly $4,000 as the nucleus of a hospital fund for students.

THE NEEDS OF THE COLLEGE.

Colorado College, never more truly than to-day, has great and pressing needs. The College stands upon a firm financial basis; but greater facilities in the way of equipment are an immediate necessity. The Trustees and Faculty feel it imperative that the opportunity for service which lies before the College, and the conditions by which this opportunity can be embraced, be understood. The urgent demands of the hour should be realized, not only by those who in previous years have nobly aided the College, but by all persons who are interested in the cause of learning, in the progress of science, and in the growth and development of the best educational institutions as a safeguard for republican government. Among the needs which force themselves upon attention are the following:

General Endowment.—The growth of the College has been so great than an increase of one million in its endowment funds is seriously needed.

Endowment of Professorships.—It is greatly to be desired that the chairs in the various departments be permanently endowed. This need has come to be urgent by reason of the rapid growth in numbers and the consequent demands for instruction and for more complete courses.

Funds for the Library.—The permanent fund for purchasing books is too small, and both the regular work of the College and the value of the Library to the city are seriously hampered by this limitation. The College appeals earnestly to lovers of books for money to use for this purpose, either to be added to the permanent fund or to be immediately expended.

Special Funds for Scientific Research.—Money to be devoted to scientific work in special lines is very greatly needed. The opportunities of Colorado College in this direction are unusual, because of the geographical, meteorological and geological situation. The attention of those interested in the advancement of science is earnestly called to this fact.

Physical Apparatus.—The Physical Laboratory and the Observatory possess some very good apparatus, but a great deal more is needed for effective work in advanced classes and for the purpose of original investigation. With a few thousand dollars our facilities could be immensely enlarged.

Residence Hall.—It is hoped that the young men may soon be provided with another residence hall, as the need is most pressing.

Scholarship Funds.—The Trustees desire to emphasize the fact that many young people in a new country are obliged to earn their education by hard and self-denying

work. Colorado College needs a large addition to her scholarship funds. Money thus applied tends directly to the profit of the individual and of the country.

Infirmary Building.—The infirmary in Ticknor Hall, which is available for young women only, is inadequate for the growing needs of the College. A separate building, in which contagious diseases can be cared for as well as ordinary cases of illness, is a necessity.

Endowment of the Infirmary.—During the past year a fund has been started for the endowment of a cot to provide for illness among students who are working their way. Additions to this fund are an urgent need.

FORMS OF BEQUEST.

Those who intend to devise property to Colorado College, or to the Woman's Educational Society, are requested to employ one of the following Forms of Bequest:

"I hereby give, devise and bequeath unto The Colorado College, of Colorado Springs, Colorado, the sum of.....Dollars."

"I hereby give, devise and bequeath unto the Woman's Educational Society of Colorado College, of Colorado Springs, Colorado, the sum of.....Dollars."

If property other than money is willed, the form should be correspondingly varied.

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